

MANUFACTURERS' RECORD.

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Manufacturers' Record.

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BALTIMORE, SEPTEMBER 22, 1899.

Trust-Grapplers.

There are indications that the politicians will have a monopoly of the trusts in bolstering up their particular industry. The outcome of the conference at Chicago was aptly characterized by W. Bourke Cockran when he said that it had accumulated a great variety of ideas, but "when all is over none of us quite knows what we have been talking about." Just at present this country has a superfluity of political ideas, and the natural result is that quite frequently the inventors of these ideas find themselves in the position of Mr. W. Bourke Cockran in not knowing what they have been talking about. At the same time the observer of events has come to regard any gathering at which W. Bourke Cockran or W. Jennings Bryan are permitted to give vent to their ideas as having, ipso facto, a decided political tinge. This Chicago demonstration seems likely to be reinforced by the meeting this week of another so-called trust conference at St. Louis. Governor Sayers, the originator of the latter conference, says that he is in favor of the destruction of the trust, which, "as it now exists, is an evil—a terrible evil—with which we must grapple sooner or later."

With some apprehension that we may be accused of splitting hairs, we suggest that would-be grappers of trusts might have difficulty in finding a trust to grapple. As a matter of fact, the aggregations known as trusts have, with few exceptions, if any, ceased to be trusts and have become corporations which, under our form of government, have legal rights equal to those of individuals. To destroy them root and branch will require, if we be not mistaken, the destruction, root and branch, of the system of law under which the mass of American citizens are protected in their enjoyment of life and property. But the fact that the task of grappling is to be undertaken by politicians, or by free-coins of a great variety of ideas, is a promise that the healthy advance of this country may be checked by the attempted interference with economic laws by the grappers for office. Here is an opportunity for the South to show that it is in earnest in its efforts to contribute to the industrial life of the country. The cry of "less politics and

more business" has become popular with leading Southern newspapers. They have, in persistent antagonism of the efforts of politicians to make use of a crusade against corporate capital to gain or retain office, a chance to put their preaching into practice.

Cotton In Bond.

The News of Greenville, S. C., says: Old man Seales of New York is a good old man, and he is having his round-bale-cotton idea extensively advertised. We see he has gone enthusiastically into the new sub-treasury scheme, the idea of which is to build great warehouses and advance to farmers 80 per cent. of their products, when stored, charging fair interest.

Our information about the round bale is that it deprives the farmer of the profit he now makes on his bagging and ties. As to the sub-treasury part, the farmer who has some cotton is usually able to get money on it if he does not want to sell it. Banks all over the South are anxious to lend their money on security, and cotton is as good as they want, provided there is no prior lien on it. Men with unencumbered land or cotton do not have any trouble getting all the money their values call for. For that matter, men who have established a reputation for meeting their obligations promptly do not have any trouble in borrowing reasonable amounts of money just now. The banks have it and are ready to lend it on fair prospects of getting it back with the interest.

The people who really need help and who ought to be helped somehow are the hard-working, well-meaning and honest who have suffered from unavoidable misfortune. They have no free cotton or lands to pledge, and no credit, because they have no means. If somebody will invent a way to get them out of the hole it will be well worth consideration.

The Greenville News is so generally on the right side of public questions that the Manufacturers' Record is surprised at its position in this case. The bonded-warehouse business is already in active operation in Columbia and Charlotte, and has proved a very great help to the farmers and to cotton manufacturers. If the West could not store its grain in elevators and get receipts therefor and use them with banks as gilt-edge collateral its wheat would always be rushed to market at the beginning of the season and depress prices to the lowest point, just as is the case with cotton. The general establishment of bonded cotton warehouses throughout the South working on the basis of those at Charlotte and Columbia would be—

The cheapening of the rate for money, as these warehouse receipts would be accepted as good collateral in New York, Baltimore and elsewhere, all money needed for handling and carrying cotton could be secured at from 4 to 6 per cent., according to current rates in New York.

The farmers, thus being able to store cotton and carry it at a very low rate of interest, would not be forced to sell as soon as picked. Cotton would not be crowded on the market in the fall, thus breaking prices.

Farmers and cotton buyers would then have the same advantages in handling their cotton which the West has had for many years through its elevator system.

Buyers for Northern and foreign

mills, being able to store cotton in bonded warehouses, could carry it in the South and ship it out from month to month as needed, thus benefiting the railroads and securing the lowest ocean freight rates.

Cotton-warehouse receipts would become recognized in all money centers as first-class collateral, and the whole cotton crop would then be a bankable asset, revolutionizing the business to the benefit of the entire South.

These are a few facts universally recognized by every man who has studied the question. If Mr. Seales should assist in organizing such a system, or if his advocacy of it should stimulate others to undertake such a great work, he would benefit the planters and every other business interest in the South (except the lenders of money at high rates of interest to an incalculable extent).

England's Iron Problem.

In its review of the iron and steel output for the first six months of 1899 the Iron and Coal Trades Review of London shows that of the 606 furnaces in the United Kingdom, 201 are out of blast, of which twenty-seven are probably incapable of being used again. The figures show that the supply of both iron ore and fuel in Great Britain has been much larger than usual, in spite of the threatened scarcity of both at the beginning of the year. Still, as the Review points out, there would have been even a larger output of pig iron and possibly of steel if the supply of material had been more ample, as the demand has certainly been large enough and urgent enough to justify it. This condition of things leads the Review to inquire whether Great Britain is likely to see any notable increase in its sources of production. On that point it says:

It is probable that within the next twelve months there will be a large increase of plants in a number of directions. At the present time large preparations are being made for the extension of the means of producing coke, and it is on the cards that a further output of nearly, if not quite, a million tons of that form of fuel will be available. Equally extensive preparations have been made for increasing the supply of iron ores, both at home and abroad. A large number of blast furnaces are being added to the available plants, and at least twenty-five new or reconstructed furnaces will be put in order within a few months at the outside. Nevertheless, there were over 200 furnaces unemployed during the first half of the year, and a considerable proportion of these might be resumed if the supply of raw material were equal to all emergencies.

No doubt more enterprise would be shown in providing new and modernized plants, alike for pig-iron and for steel production, were the prospects of the trade less uncertain. But there is still in many quarters an uneasy feeling that, although the American deluge may be postponed, it cannot be averted, and that when the present period of boom is over iron and steel from the United States will pour into this country like a flood. Meanwhile we have the testimony of the highest American authorities that they will have quite enough to do in attending to their home demands for at least a year to come, and many things may happen before then.

The suggestion that modern plants

should be provided, and that they would be were it not for apprehension about America as a competitor, points to the fact that the present advantageous position of the United States as an iron and steel producer and as an exporter of manufactures is largely the result of the employment in the United States of the latest and most improved machinery in the hands of modern workmen. America at present is feeling the effects of the activity to the creation of which it so largely contributed. Our ironmasters have been put to their utmost strength to meet the demand for iron, and there are indications that they will not permit themselves to be caught hereafter in a similar predicament because of a lack of productive equipment. When the present stringency is over, moreover, they will still have the superior facilities for manufacturing iron and steel which have made the United States such a powerful competitor of England, and that fact will doubtless have weight when plans are discussed for the reviving of the 200 silent plants of Great Britain.

How States May Grow.

In reply to an editorial in the Jonesboro Enterprise the Arkansas Gazette of Little Rock turned an unnecessary if not ill-humored criticism of its efforts to promote railroad building in the State to great advantage in mildly rebuking short-sighted journalism. The Gazette has been an effective worker for railroad development in a section where railroads are badly needed. At present it is engaged in a vigorous campaign to secure a bonus of \$100,000 for the construction of the Arkansas Northern Railroad, bringing in close touch with the capital the best undeveloped mineral, timber and agricultural wealth of the northern part of the State. Its efforts do not seem to appeal to the Jonesboro Enterprise, which said:

Will some liberal philanthropist kindly donate that \$100,000 to the Arkansas Northern and see if perchance the Gazette editor can't be prevailed upon to write an editorial on some new subject?

Noting this fling the Gazette quotes from the same issue of the Enterprise the following:

The condition of the sidewalks in Jonesboro is a living evidence that either Jonesboro needs more revenue or else what she has is not properly and judiciously spent. We are inclined to believe that the city needs more revenue. Will some wise son of man please find us a safe and sure and honorable way, and at the same time acceptable way, to secure more funds for public improvement? He who does will serve his people well and fill a long-felt want.

With this as a text, the Gazette calls attention to the fact that a predicate of public improvements is the prosperity of the people; that the people of Arkansas to become prosperous must have more railroads to develop the natural resources of the State, and adds:

When we secure a greater population and more railroads and industrial enterprises the rate of taxation for defraying the expenses of the State government will be re-

duced, and the citizens in towns like Jonesboro, relieved of much of the burdensome weight of State taxation, will not be unwilling to impose upon themselves a slight tax for the building of sidewalks, sewers and other local improvements.

Every town in Arkansas would be benefited by the construction of the Arkansas Northern. The building of it would invite capital and manufactory to the State, and these are all we need to insure the construction of good sidewalks and the establishment of other local improvements in Jonesboro and every other city and town in Arkansas.

This is one of the best points of the many good ones made by the Gazette during the past six months. It clearly shows the interest of every part of the great State in plans for its full development. It brings right home to the citizens of Jonesboro the advantages of railroad construction, and of the attendant and consequent influx of capital, and its advice, if followed, will do much to cultivate a public sentiment that will insure not only a hearty support by the people of the State of particular undertakings by capital for its enrichment, but also the selection of men for public office who will frame and execute laws based upon the wise and stable proposition that capital in general interested in transportation, manufactures and public improvements is a thing to be welcomed.

The Industrial Problem.

At the industrial convention at Huntsville, Ala., next month Mr. V. W. Grubbs of Greenville, Texas, will make an address on industrial education in the South. Mr. Grubbs is chairman of the State committee of industrial education of Texas, formed to awaken a lively public sentiment in making the public free-school system a medium for industrial training. In a letter to the Manufacturers' Record Mr. Grubbs writes:

For some time past I have been deeply impressed with the conviction that our educational system is defective, in that it fails to accomplish what appear to me to be the true objects and purposes of the Commonwealth in its establishment and maintenance. According to my way of thinking, the only interest the State can have in the expenditure of money for the education of the people is that they may thereby be the better fitted for the requirements, duties and responsibilities of life, and that as the vast majority must of necessity live by industrial effort, especial attention should be given to providing facilities for the attainment of skillfulness and proficiency therein, and to the encouragement of our youth to become expert in the industrial pursuits of life. The State should, in so far as possible, discourage the prevailing idea that labor is degrading, which is, in my opinion, to a great extent, responsible for the present unhappy condition of what are termed the laboring classes. Taking no part or special interest in their employment, they have, as a general thing, toiled with their limbs without the intelligent direction of well-trained minds, and as a result no perceptible advance or improvement is made in their conditions.

Mr. Grubbs expresses truths which are becoming more and more generally recognized in the South, as well as in other parts of the country. It is a fact that the majority of men must make their living by their hands. It is likewise generally recognized that it is the part of wisdom for the State to provide, where necessary, the means for removing ignorance from the masses. The excellent theory of public education, however, has, in many instances, received the wrong twist in application, with the result that real education, the development of faculties which will enable men and women to be happy in a condition suited to their circumstances, or will qualify them in special cases to rise by native ability above circumstances, has yielded to

methods that have led them to seek careers for which their disqualification is only exceeded by their ambition. There are tremendous reasons, however, why real education should be given to the young people of the South.

The industrial regime of that section, delayed by untoward conditions, has opened. There is a demand for brain work as well as hand work in agriculture and manufacturing. The demand will not be met by overstocking minds with material which must be largely eschewed in gaining success in the professions. It will only be met by offering youths the opportunity to acquire skill in industrial pursuits without dwarfing their common sense, their mother wit, their intelligence. North Carolina, South Carolina and Georgia have already undertaken to train young men specially for the expanding textile industries, upon which the prosperity of those States must largely depend. They and other States have an equipment for training lads to apply science to agriculture, but the South has by no means the facilities demanded for the complete preparation of its people to handle the industrial problems of the future. It has to a large extent to forget that the professional career is the summum bonum, and to learn that the man makes the task, and not the task the man.

Such an organization as that represented by Mr. Grubbs and such gatherings as that at Huntsville should prove important factors in the cultivation of the spirit which must dominate the South if it is to enjoy its natural heritage.

Trouble in Tennessee.

Commercial bodies and manufacturers of Chattanooga are entering emphatic protests against the apprehended intent to enforce according to the strict letter the law relating to back assessment of manufacturing plants. The contention of the opposition is that the law authorizing back assessment was intended to reach only those persons or corporations which were endeavoring to evade all taxation, or to correct obviously wrong assessment, and should not be construed as providing for a second taxation of property upon which taxes had already been paid, and that any policy to the contrary is unjust and detrimental to the best interests of any State or community, as it will result in uncertainty, likely to prevent investments in new industries and to retard the extension of enterprises already in operation. Three companies have been cited to show causes why their property should not be reassessed. The movement in opposition to the new interpretation of the law is not in the interest of these three companies, but is regarded as applying not only to all manufacturers in the State, but to everybody interested in its development.

There is no doubt that should the interpretation be sustained Tennessee, which needs more capital for the development of its mineral and industrial resources, will suffer a setback. Invested capital is not satisfied merely with rich natural resources. It wants to be assured that it will receive equitable treatment at the hands of legislators and administrators of the law, and that it will be protected in communities which may be fortunate enough to secure its presence. Public sentiment in Tennessee has recently developed strongly, under the guidance of wise leaders, toward the encouragement of capital, and it is to be hoped that the

discussion, which has come to a head at Chattanooga, may be settled satisfactorily to the manufacturers and other enterprising citizens of the State.

IRON'S STRENGTH UNDIMINISHED.

Advance of a Dollar Per Ton at Birmingham.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., September 19.

The continuity of the demand for iron and the firmness of the market price tell the story of buyers' wants and necessities. The demand keeps up finely, and there has been an advance during the week of one dollar per ton. On Saturday orders were refused for gray forge at prices under \$16, and this figure was named as the price. It had been selling during the week at \$15 to \$15.50, and was in fine demand. The advance of price to \$16 is equivalent to serving notice that the orders registered for this grade are at or near the limit of present anticipated supply. No. 2 foundry, which for the preceding week was quoted at \$17, found willing purchasers at \$17.50. One lot of 2500 tons went at that price, delivery commencing in April. While the market is not quoted at \$18, buyers can calculate on paying that price for current and anticipated wants. Silver gray was sold at \$20. For No. 2 soft \$17.50 was bid and declined. The whole list shows undiminished strength. The question was asked, from whence do the orders come?

The answer was, from everywhere. In volume the business ranged from 60 to 70 per cent. above output to double the output. Some sold more freely than others, and all were sellers. The inquiries and orders to one interest early on Saturday morning aggregated 35,000 tons. Some of the pipe interests which have been hesitating about buying finally came in and supplied wants. It has been the same with other interests. There was some cabling about export business, but close figuring could not reduce the obstacle of \$2.50 to \$3 against transactions. The present outlook is decidedly against an early revival of this business, and the only hope for it in even a small way is by the diversion to it of orders purchased when prices were lower. There must be an evening up of prices to do this. The steel mill has constant inquiries for steel for delivery at its own convenience, but has made only trifling sales. It prefers waiting until the commencement of operations. It has sold some blooms at \$38. The new pipe plant mentioned in last letter was organized the past week, with a capital of \$175,000. The capacity will be 100 tons per day, to be increased as occasion demands. It will add at least 200 to the ranks of labor.

With the decree of the federal court confirming the sale of the Highland Avenue & Belt Line the consolidation of all city and suburban railway lines under one management was practically accomplished. The Birmingham Railway & Electric Co. announced that the management of the Traction Company had fallen to it, and that each company would have the same officers. The Belt Line has a separate organization. It is understood that the ownership of the electric car lines is practically in New York and Boston hands. An assessment of \$500,000 has been made to complete the change of the system to an electric one, and a fixed offer made to any of the stockholders who prefer realizing on their stock. By having each company retain its separate organization all lawsuits aimed at consolidation, violation of charter, etc., are headed off, for in a legal sense there has been none. The Belt Line, it is understood, goes to the Seaboard Air Line, which can claim its own whenever inclination

prompts. The owners of these lines are largely interested in real estate here. Therefore the interests of Birmingham are their interests also, and they can be depended upon to initiate a policy that will have in view solid improvement here.

A strike among the carpenters occurred the past week, who demanded a minimum of \$2 for a day's work of nine hours. A sufficient number of contractors were compelled by circumstances to concede the demand to make it probable that all will accept it. There is so much going on in the building line of an urgent nature that no suspension can be permitted. Within city limits as well as outside improvements greet one on every hand. Practically new towns are being built all around us. A house is rarely permitted to reach completion before it is occupied, and in every line of building there is and will be for months to come occupation for all who are competent workmen. All our industries are full of work, and new enterprises are being considered and planned every week.

J. M. K.

Eastern Iron Markets.

[Special Cor. Manufacturers' Record.]
Philadelphia, Pa., September 20.

The iron market is full of interest. The greatest anxiety prevails over the prospects. Prices have been steadily moving upward. It is impossible to forecast anything. The facts only can be stated, and each person can form his own opinion if he thinks an opinion is worth while. In pig iron only a small business has been done, because the production for months ahead has been sold. Within a few days Eastern buyers have placed good-sized orders for Alabama iron for early spring delivery. Pennsylvania furnaces have nothing to sell. For a week prices have been stationary. Forge iron is sought after for winter melting, and \$20 is about the price for a good article. No. 1 X foundry is \$23 to \$23.50, and No. 2 X foundry, which has been selling freely, is \$22 to \$23. Every consumer wants more material, and hence prices preserve a strong upward tendency.

Muck bars are stationary at \$33 to \$34. Billets have bounded up within a few days to \$41 to \$42 for next month's shipments, and over 20,000 tons were sold, though strange to say, the selling price was \$36 to \$37. Billet capacity in the East is being increased. Improvements in rolling-mill capacity are being made at Birdsboro, Norristown and Reading. All the mills about Pottstown are far oversold. The mills at Coatesville are being improved, and, in fact, productive capacity everywhere is being increased. Three blast furnaces will be blowing in this district as soon as they can be put in repair.

Bar-iron makers report a pronounced improvement in demand this week from small buyers. Store stocks have been depleted. Every small consumer is after iron. Steel bars are also particularly active, and tested iron for electrical purposes cannot be furnished fast enough; prices, 2 cents for refined, 2.20 tested and 2.30 for special steel bars.

The sheet mills are catching up slowly, but were their managers so disposed they could load up with business for months ahead at current prices.

The merchant-steel mills are all sold for ahead, and prices are moving upward.

Large orders for steel rails have been placed at \$35 at Pittsburg and \$36 at Eastern mills. The demand for girders is very urgent, and railroad building, both of standard gauge and trolley lines, is crowding capacity.

Plate and structural mills are all over crowded, and prices of plates have moved up. Structural work was never inquired for to such an extent.

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Old iron rails are very far short of demand, and are quoted at \$22 to \$23.

All kinds of scrap continue exceptionally scarce and dear.

MORE COKE OVENS.

Equipment To Be Increased in Southwest Virginia.

[Special Cor. Manufacturers' Record.]
Bristol, Tenn.-Va., September 18.

The Virginia Iron, Coal & Coke Co. has decided, in addition to several hundred coke ovens already erected at Toms Creek, in Wise county, to build 200 more, and also to erect there 200 dwelling-houses, a large iron-ore-washer plant, an electric-light plant and several other minor buildings; to build at Looney Creek 300 coke ovens, and at Bristol an elegant office building, and also, perhaps, a freight and passenger depot.

It is stated that the Big Stone Gap (Va.) furnace, which was recently purchased by the Union Steel & Chain Co., will be put in blast as soon as repairs can be made.

Iron ore is being mined in Corson valley, in Smyth county, Virginia, for use at the Bristol furnace.

The Stuart Land & Cattle Co. will build fifteen miles of macadam road from Elk Garden, Russell county, to Saltville, Washington county, Virginia. Over this road will be driven the several thousand head of fine export cattle which are yearly shipped to Europe by this company. At Saltville they will be loaded on Norfolk & Western cars and taken to Norfolk, and there placed on steamers for the transatlantic trip.

The Iron and Metal Trades.

[Special to Manufacturers' Record.]
New York, N. Y., September 21.

In its review of the metal trades the Iron Age says this week:

"The feeling is growing among large interests that prices have risen close to the danger point, if in fact they have not gone beyond it. Much has been made of the fact that demand apparently continues unabated; that heavy premiums are being paid for prompt delivery in nearly all lines, and that very large sales of pig iron have been made for next year. All this is true, and it is certain, too, that we are to have an active winter, because the orders on hand now make that certain."

"But consumers are still running very largely on relatively cheap material, and if even 95 per cent. of the tonnage for next year were taken at present figures, the odd 5 per cent. would force a decline to a more conservative basis. The supply is increasing in two ways: the production of metal and the marketing of old material is increasing, and the greater part of the export trade, equivalent to close to 1,000,000 tons, is being cut off and the material diverted to our own market."

"On the other hand, it is too much to expect that the doubling of prices will not adversely affect consumption, even if it be true that a prosperous man can better afford to pay double prices now than a poor one could buy anything at any price a year ago. In fact, it is a very interesting question whether toward spring a temporary decline in consumption might not prove very welcome. Even now long-headed pig makers in the central West are contracting for the shipment by rail of iron ore from the Lake Superior ranges, because there is serious danger of shortage before the 1900 season opens. It is this which puts pressure on the Bessemer pig market."

"Much is made of the argument that costs have increased largely and are bound to advance further. As compared with the advance in price this addition in

cost is relatively small for the Southern pig-iron makers—a strong point in their favor.

"For the central West a good deal hinges on the lake ore situation. The ore mines have not had even a modest share of this year's great prosperity. They will demand and will get something next year, and even now an advance of \$1 per ton is spoken of as a minimum on the price of ore, with fully fifty cents additional to the freight rate. As for coke, nothing can be said, since the policy of the producers has not been outlined; \$2.50 at the oven is regarded as a possibility, while the price may be \$3 or more. These additions to cost would only apply to those who do not control their own materials, and they are the minority, counting by tonnage. The great producers would only be partially affected.

"Under the circumstances everything which tends to throw light upon the situation, so far as finished goods are concerned, deserves the closest attention. In this regard the rail situation is specially interesting. We understand that the sales for next year's delivery by Western and Eastern mills figure up close to 200,000 tons. The Western mills started taking orders at \$29, and have now advanced their prices to \$33, while the Eastern mills began with \$28, and are now demanding the same figure. We do not hear of any opposition to these figures, which would compensate the rail mills for this year's poor work, when the bulk of the orders were taken at the range of \$16 to \$20 at mill. The railroads this year certainly did well. We know of instances where the roads are getting more money on the track for the old rails which they are taking up than the new rails cost them which they are laying down."

Increased Iron and Steel Consumption Through Pressed-Steel Cars.

The Iron and Coal Trades Review of London, in discussing the growth of the pressed-steel-car industry, which, by the way, is one of the ever-widening uses of iron and steel, says:

"From American sources we learn that the pressed-steel car, now a great Pittsburgh industry, owes its American existence to Charles T. Schoen, who a few years ago was attached to a Philadelphia car shop. He designed some pressed-steel contrivances for a wooden freight car, and by the success of this idea was led in the course of time to construct a car made entirely of pressed steel, with the exception of the wheels and journals. In the meantime Andrew Carnegie and his friends had built the Pittsburgh, Bessemer & Lake Erie to carry iron ore from the docks on Lake Erie to the Carnegie Company's blast furnaces near Pittsburgh. Mr. Schoen, the designer of the pressed-steel car, built a number for the Bessemer railroad, and the success of the new car dates from the day on which the first train made its trip to Conneaut, on the Lake Erie shore, and returned loaded with iron ore. The receivers of the Baltimore & Ohio took up the idea, the Pennsylvania Railroad followed their example, and soon an immense industry was established. To reduce the dead-weight and yet increase the load-bearing capacity of the parts was a problem that was not solved till the adoption of steel, pressed into shapes best calculated to bear the strain of heavy loads. In the United States the wooden car of 70,000 pounds capacity weighed 35,000 pounds, the ratio of the light weight, or weight when empty of the car to its carrying capacity being 50 per cent. The pressed-steel car of 80,000 pounds capacity weighs 28,500 pounds, a ratio of 35.62 per cent. One of 100,000 pounds capacity weighs 35,500 pounds, a ratio of 32.27 per cent. In brief, the wooden car that carries 70,

000 pounds of coal weighs 35,000 pounds; the pressed-steel car that carries 110,000 pounds of coal weighs only 500 pounds more. The wooden car carries coal equal to twice its weight; the pressed-steel car carried three times its own weight with 3500 pounds to spare. Railway reports show that the 80,000-pound cars of the Pennsylvania Railroad are built at a cost of \$800; it is estimated that the pressed-steel car of 100,000 pounds capacity cost about \$1000. The life of a wooden car averages fifteen years, with \$35 a year for repairs, and the life of a pressed-steel car is fifty years, with repair costing \$10 to \$15. Three years ago the pressed-steel-car industry was in its infancy; two and one-half years ago it employed 1000 hands; today 10,000 men and boys are earning their living at it. The Baltimore & Ohio Railroad has bought 6000 cars, the Pennsylvania Railroad 3000. The rise of the pressed-steel car has benefited the steel-rail and bridge-material manufacturers, as railroads are laying heavy rails and strengthening bridges to prepare for the revolution in the freight-traffic system that the new cars have produced."

WEST VIRGINIA COAL.

Interesting Facts About the State's Productive Capacity.

Interesting facts are presented by the United States Geological Survey about the increase in the production of coal in West Virginia. The State still ranks third as a coal producer, the total output in 1898 having been 16,700,999 tons. The report says:

"West Virginia has an unrivaled record in the history of coal mining in the United States. The records of the years prior to 1878 are incomplete and unreliable, but beginning with an output of 1,120,000 tons in that year, production has increased each year with but one exception, until in 1898, twenty years later, the product exceeded 16,500,000 tons, fifteen times what it was in 1878, and indicating an average annual increase of 750,000 tons. The increase of nearly 2,500,000 tons in 1898, and a decrease of approximately 1,500,000 tons in the production of Illinois, puts West Virginia within 1,900,000 tons, or about 10 per cent., of that State, and if the ratios of increase in the two States be taken as a guide for the future, Illinois will have dropped to third place at the close of the century—December 31, 1900. Taking the record of the two States for the last fifteen years, and dividing the time into periods of five years each, as the best method of showing the average increase in business, we find that for Illinois the average yearly production in the five years, 1884 to 1888 inclusive, was in round numbers 12,400,000 tons. In the next five years, from 1889 to 1893 inclusive, the average yearly output was 16,553,000 tons, an increase of 33.5 per cent. In the five years ending in 1898 the average production was 18,650,000 tons, an increase of 12.5 per cent. over the second period and of 50 per cent. over the first. Dividing West Virginia's product in the same way, it is shown that the average output in the first five years was 4,233,000 short tons. In the second period it was 8,659,000 short tons, an increase of over 100 per cent., and in the final five years the average product was 13,368,000 short tons, 54 per cent. more than in the second term, and 3.2 times the average for the first five years. The figures taken in connection with the statistics of the last three years show that the production in each of these States in 1900, if not interfered with by strikes or other untoward conditions, will approximate 21,000,000 tons."

"Comparing the production of 1898 with

that of previous years, and studying the wonderful development of the coal-producing regions, it will be of interest to consider the records of some of the important fields. Of these, there are four—the Fairmont or Upper Monongahela and the Elk Garden or Upper Potomac, in the northern portion of the State, and the Pocahontas or Flat Top, and the New River and Kanawha river fields, in the southern portion. The most important of these four regions is the New and Kanawha river fields, embracing Fayette and Kanawha counties. In 1886 the output from the New river and Kanawha river field was 2,290,563 short tons. Two years later it had increased to 2,840,630 tons. In five years more it had increased over 40 per cent. to 4,098,112 tons, while in 1898 it amounted to 5,947,272 tons, an increase of nearly 50 per cent. in the last five years.

"The Pocahontas or Flat Top field embraces McDowell and Mercer counties, in West Virginia, and Tazewell county, Virginia. Probably more than half the product of Tazewell county, though credited to Virginia, is taken from the West Virginia side of the line, but as the opening is in Virginia, and no accurate separation can be made, the entire product is given to Virginia. The mines of McDowell county did not begin shipping until 1889. In 1891 it produced more than either of the others, and since 1893 has produced more each year than the other two together. In 1888 Mercer and Tazewell counties produced 1,170,791 short tons of coal. In 1893 the product of the district was 3,815,280 tons, and in 1898 it was 5,521,100 tons."

"The Fairmont or Upper Monongahela region, embracing Harrison and Marion counties, has shown the largest ratio of increase in the last ten years of all the coal-producing regions of West Virginia, Marion county taking the lead. In 1888 this district produced less than 500,000 tons. Five years later it produced over 1,250,000 tons, and this was more than doubled in the next five years, the product in 1898 amounting to 2,525,294 short tons."

"The Upper Potomac region, which is the southern extension of the Cumberland field of Maryland, had a product in 1888 of 518,878 short tons, of which 90 per cent. was from Mineral county. Five years later the product was 1,129,397 tons, of which Mineral county produced somewhat less than 60 per cent., while in 1898 the product increased to 1,531,562 short tons, of which Mineral county produced less than 40 per cent., and Tucker county produced over 60 per cent."

"The enterprise of the four railroads handling the product to market—the Baltimore & Ohio, the West Virginia Central & Pittsburgh, the Chesapeake & Ohio and the Norfolk & Western—is brought into sharp contrast with the manufacturing enterprise of the people of the State, for, with the exception of a comparatively small amount used at the iron works in and around Wheeling, and at the salt works in Mason county, together with the ordinary domestic consumption and that of the transportation interests, practically all of West Virginia's coal is shipped out of the State. Of the 16,701,000 tons produced in West Virginia in 1898, probably 15,000,000 tons were consumed outside its borders."

"More than 600 men are employed under Major Daniel C. Kingman in the work of improving the Tennessee river."

"At a sale of Burley tobacco at Louisville, Ky., last week \$16,356 were received for 101 hogsheads."

"A board of trade is to be organized at Oakland, Md., next week."

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Railroads in Mississippi.

Discussing the railroad mileage figures in Mississippi, a dispatch from Jackson says: "It cannot be denied that for the past two years more interest has been taken in railroads and railroad building in Mississippi than at any time during recent years. It is true that this interest has not had as yet any practical results, with the exception of the extensions of the Yazoo Delta, Yazoo & Mississippi Valley branch, Gulf & Ship Island and Mobile & Ohio, but the number of projected extensions and branches that are now being seriously discussed gives color to the idea that in the near future there will be a substantial and surprising increase in the railroad facilities of Mississippi. The extension of the Mobile, Jackson & Kansas City to Jackson, the building of a branch of the Illinois Central from West Point to the coal fields of Alabama, the completion of the Gulf & Chicago to Houston, the putting in of a branch line of the Illinois Central from Parsons to Grenada and the completion of the Gulf & Ship Island to Jackson are some of the railroad enterprises the close consummation of which the future holds in store. The fact that there are substantial reasons why these lines should be put in is sufficient warrant that at least some of them will be built in the near future. The fate of the branch from Parsons to Grenada will be solved in a few days on the report of the civil engineers. There are ten counties in Mississippi that have no railroads, but the completion of the Gulf & Ship Island will diminish the number. According to the latest figures, Washington county has the largest mileage in the State, 123.9 miles, and Bolivar comes next with 113. Hinds with 111 and Coahoma with ninety-two are the next highest. Tate county has the least mileage of the counties that have any railroads at all. Both it and Pontotoc county have eleven miles apiece, but a slight fraction saves Pontotoc from occupying the last place. Jasper with twelve miles, Issaquena with twelve, Chickasaw with thirteen, Adams with fifteen and Choctaw with sixteen are the other close contestants for the last place as regards mileage."

Illinois Central Report.

The annual report of the Illinois Central Company shows that the gross receipts during the past fiscal year were \$28,114,689, an increase of \$796,870. The expenses of operation and taxes were \$19,562,261, a decrease of \$109,921. The income from traffic by the excess of receipts over operation and taxes was \$8,552,427; income from other sources, \$2,581,077; surplus dividend fund brought forward, \$961,665; the total fixed charges for rent \$6,802,004, leaving available \$5,293,166, of which \$2,812,500 went to dividends and \$1,475,040 to the betterment, leaving \$1,005,626. Of particular interest to the South is the statement of the report that with the view to obtaining a supply of fuel for the company's needs in the South and of enabling ship-owners and manufacturers of New Orleans and elsewhere on the Southern lines to count upon reasonable prices for a steady supply of coal, a branch line has been built from Winfield to the coal mines at Brilliant, Ala., eight miles in length, and the right to run trains over the Kansas City, Memphis & Birmingham Railroad from Winfield to Aberdeen station in Mississippi has been secured. Moreover, the

contract has been made with the Nashville, Chattanooga & St. Louis Railroad Co. for the interchange of freight at Martin, Tenn., and at Paducah, Ky., on satisfactory terms, and passenger trains are now run over the Illinois Central and the Nashville, Chattanooga & St. Louis Railroad between St. Louis & Nashville without change.

Extensions in Texas.

A dispatch from Fort Worth states it is believed in railroad circles that the extension of the Pecos Valley road south is an assured fact. The road, if built, would cross the Rio Grande river about 225 miles east of El Paso and penetrate one of the richest grazing districts in Mexico. One effect of the line would be to stimulate the trade of the large stockmen of Northern Mexico with Galveston, as the connection made with the Southern Pacific would bring them about 500 miles nearer that port than at present. The extension of the Texas Central from Albany to Stamford, a distance of forty miles, is being pushed rapidly ahead. Two shifts of laborers are being worked on the construction, and the track has been laid about six miles northwest from Albany. The completion of the extension will result in increased freight business for the Texas Central, as the road will pass through new territory.

Cane Belt Bonds.

The Texas railroad commission has authorized the Cane Belt Railroad to issue bonds to the amount of \$12,000 per mile on twenty-eight miles of road from Sealy to Bonus. Eleven miles of this road, from Bonus to Eagle Lake, are under operation, and the other seventeen miles, from Eagle Lake to Sealy, the crossing of the Santa Fe and Missouri, Kansas & Texas, are graded and ready for the rails. General Attorney Jonathan Lane of the Cane Belt has received assurances from the commission, when profile and other papers are submitted, will authorize the same amount on proposed road from Bonus to the mouth of the Brazos river.

Railroad Notes.

The United Railways Co. of St. Louis has decided to increase its capital stock from \$5,000,000 to \$45,000,000.

During August the Alabama Car Association handled 33,000 cars, an increase of more than 11,000 over the same month last year.

The gross earnings during the past year of the Missouri, Kansas & Texas Railway were \$11,930,334. The surplus was \$548,683, an increase of \$73,926.

Nearly a dozen architects have submitted plans for the joint depot to be built at Richmond, Va., by the Chesapeake & Ohio and the Richmond, Petersburg & Carolina railroads.

The cornerstone of the new Southern Railway passenger station at Danville, Va., was laid with Masonic ceremonies, and an enthusiastic meeting of citizens was afterward held at the Academy of Music.

The force of men completing the 20-mile gap between Shreveport, La., and Texarkana, Ark., on the Texarkana, Shreveport & Louisiana Railroad, is being increased and the work is being pushed rapidly.

Application will be made for a charter for the Union Passenger Station Co. to build a union station at Savannah for the Plant system, the Southern, the Florida Central & Peninsular and the Georgia & Alabama roads.

A dispatch from Austin, Texas, says that the Goulds propose to make exten-

sions of some short lines in the northern and central part of Texas, so as to make a through line from Fort Worth by way of Waco to Galveston.

Morton Thayer of Kansas City and others propose to construct the Kentucky Western Railroad from Blackford to Dickinson, Ky., seventeen miles, through the Kentucky coal fields, and connecting with the Louisville & Nashville Railroad.

The earnings of the Louisville & Nashville for the first week in September were \$505,040, an increase of \$79,490 over the same week last year. Since July 1 the earnings have been \$4,955,705, against \$4,119,963 for a similar period last year.

Reports for year ending June 30, 1899, received by the Texas railroad commission last week show the following: Sherman, Shreveport & Southern, gross earnings \$403,490, net income \$97,517; Texas Mexican, gross earnings \$152,750, net deficit \$150,740.

A dispatch from Knoxville, Tenn., states that the Virginia & Southwestern Railway Co. is negotiating at Bristol for the purchase of the Marion & Rye Valley Railroad, and also valuable iron-ore property, with the possibility of the Rye Valley being extended.

It is announced that the Queen Anne's Railroad Co. has leased from the Baltimore Steam Packet Co. a part of the pier on Light-street wharf, Baltimore, Md., which will be used as the terminal station for its steamboat service between Queenstown, Md., and Baltimore.

The improvements during the past year on the Nashville, Chattanooga & St. Louis Railway included three new bridges on the Chattanooga division and the enlargement of culverts there, and the extension of the Middle Tennessee & Alabama Railroad more than four miles to Jeff, Tenn.

The citizens of Greenville, Ga., have selected a committee, consisting of Messrs. W. T. Revill, B. O. Hill and W. S. Howell, to make a proposition to the management of the Macon & Birmingham Railroad for the construction of that railroad to Greenville by way of Snellings, and from Greenville to Odessa.

The annual meeting of the stockholders of the Nashville, Chattanooga & St. Louis Railway was held on September 13 at Nashville, and the old board of directors re-elected. T. W. Edwards of New York was elected a director to succeed Col. E. W. Cole, lately deceased. The directors met and re-elected all of the old officers.

Louisville, Ky., is to have a new connection with Chicago by way of Indianapolis, according to a report from Chicago, by the construction of about forty-five miles of new road by the Chicago, Indianapolis & Louisville Railroad from Indianapolis to Oakland, where connection will be had with the Chicago & Louisville main line of the Monon.

The gross earnings last year of the Cleveland, Cincinnati, Chicago & St. Louis Railroad were \$14,719,362.62; operating expenses and taxes, \$10,645,554.93; net earnings, \$4,073,807.75; interest and rentals, \$2,873,709.69. Four quarterly dividends of 1½ per cent. on the preferred stock amounted to \$500,000. The surplus of the year was \$700,098.06.

W. H. Wells, chief engineer of the Southern Railway, is, according to a dispatch from London Depot, Ky., placing engineers and surveyors at work on running the line for the construction of a line 115 miles long between Burgo, Ky., and North Jellico, Tenn., to give the Southern direct connection between Norfolk and the grain trade of the Northwest. It is stated that the construction,

which will cost \$2,000,000, is to begin as soon as the survey has been completed.

The Texas railroad commission has approved the contract submitted by Judge Stedman by which the International & Great Northern is to operate the Calvert, Waco & Brazos Valley, extending from Lewis Switch to Calvert. The contract calls for single-line rates and authorizes the first-named road to grant terminal facilities from Lewis Switch to Hearne for the other road, and makes the latter road under the former's control.

Application has been made for permission to consolidate under one charter the Texas, Sabine Valley & Northwestern, the Sabine & East Texas and the Marshall, Timpson and Sabine Pass Railroad, three short lines now operated under separate charters, so as to complete a new trunk line through Texas from Omaha to the Gulf. The applicants have been informed that legislative action is necessary for the consolidation.

According to a dispatch from Charlotte, N. C., the narrow-gauge Carolina & Northwestern Railway is to become an important element in developing extensive iron and coal properties in the East Tennessee fields. Plans for the road contemplate changing it to a narrow gauge, extending it from Lenoir, N. C., to Elizabethton, Tenn., and from Chester, S. C., fifty miles to Camden, tapping the great water-power of the Catawba river.

The call for a meeting at Saluda, S. C., on September 30 of the stockholders of the Saluda & Johnston Railroad Co. for organization has revived interest in the project of bringing railroad connections to Saluda, which is fourteen miles from any railroad. It has been believed that the Southern would either extend the Carolina Midland Railroad from Batesburg, the present terminus, to Saluda, or else build from Johnston. The subscription books for the Saluda & Johnston have been open and a good start has been made, so that more than \$5000 to the capital stock in labor, material or cash has been subscribed.

THE HUNTSVILLE CONVENTION.

President McKinley Invited to Attend the Gathering.

Mr. N. F. Thompson, secretary of the Huntsville (Ala.) Chamber of Commerce, will be proposed by that body for the chairmanship of the Southern Industrial Convention, which is to meet at Huntsville in October. The convention is the conception of Mr. Thompson, and by his familiarity with the details of its preliminaries will be eminently qualified to preside over its deliberations.

An invitation has been extended to President McKinley to attend the convention. In a letter of invitation Secretary Thompson writes as follows:

"You will observe, from the list of subjects selected for discussion, that the entire field of the South's material interests is covered, including the vexed and much-discussed racial problem. I can assure you that the best informed and most representative minds obtainable have been selected for the presentation of these various interests, which are of such vital importance to the welfare of the Southern States, the wisest and most profitable solution and adjustment of which is so earnestly desired by you, and, I trust, by every citizen of our great republic. Especially, I may say, will the race problem be presented by the two broadest, most enlightened, practical and conservative representatives of the negro race in their behalf, and on behalf of the Southern white man's view, by two gentlemen equally capable in their special capacity for so difficult a duty."

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

GRAIN FOR THE GULF.**Expectation of the Illinois Central Railroad Company.**

Persons interested in the development of the export trade of the Gulf ports will be interested in the statements made in the annual report of the Illinois Central Railroad Co. regarding its plans for New Orleans. The report says:

"The States traversed by the Illinois Central and the Yazoo & Mississippi Valley railroads and those west of them produce the exportable surplus of grain grown in the United States. Every point on these railroads is nearer by rail to New Orleans than to New York excepting only Chicago, which is precisely 912 miles distant from each of those ports. While the Illinois Central does not directly reach Minneapolis, the center of the flour milling, it has close connections with that city, which is also nearer by rail to New Orleans than to New York. Of the 2,715,981 tons of grain, flour and other mill products carried by the Illinois Central and the Yazoo & Mississippi Valley railroads during the year ended June 30, 1899, less than one-fifth (536,841 tons) were exported through New Orleans to European and other ports."

"Under these circumstances, it is reasonable to expect that the export of breadstuffs through New Orleans will increase largely, and the company has therefore contracted for 500 additional grain cars, of a capacity of forty tons each, for delivery in season to carry the large crops now being harvested. Although the corn crop of 1898 was of such notoriously poor quality, no complaint has been received of any damage from heating having occurred in the 19,670,336 bushels which were delivered by the Illinois Central and the Yazoo & Mississippi Valley railroads for export through New Orleans."

Wheat at Charleston.

Mr. L. A. Emerson, assistant general freight agent at Charleston of the Southern Railway Co., is quoted as stating that that city should enjoy a big export business this season, and that a large number of transatlantic steamers have been chartered to handle it. It is expected that large quantities of wheat will be among the shipments, as the Southern will continue the work begun by the South Carolina & Georgia road some months ago, the elevator offering ample facilities for handling the grain into steamers loading at the dock, which can receive at the same time cargoes of cotton and iron.

Export Round Bales.

A dispatch from Pensacola, Fla., states that representatives of the American Cotton Co. are endeavoring to secure a site there for the erection of immense cotton warehouses, through which will be handled for export all the cotton from the company's round-bale compresses in Alabama, Georgia and points in other States.

Jottings at the Ports.

The entire length of the channel at the entrance to Pensacola harbor now shows a depth of thirty-one feet.

Newport News, Va., is now shipping more than 500,000 bushels of grain and 1000 head of cattle every week.

The Italian steamship Hercules sailed last week from Lambert's Point, Va., for Genoa with 3500 tons of Pocahontas coal.

It is rumored at Beaumont, Texas, that the Southern Pacific Railroad Co. is arranging to run the Morgan Line of steamships into Sabine Pass.

During the past three weeks the exports of pig iron by way of New Orleans have aggregated more than 6500 tons. The iron went to Genoa, Hamburg, Delasco and Rotterdam.

The largest load of grain that ever cleared from New Orleans, and one of the two largest that ever cleared from an American port, was taken out by the steamship Angola last week. The Angola carried 352,000 bushels, bound for Cardiff, the cargo being shipped by the Middle Division Elevator Co. at elevator D, Stuyvesant docks.

Prejudice Against American Dry Goods

Kingston, Jamaica, September 13.
Editor Manufacturers' Record:

Our Mr. C. Wessels, who manages our head office in New York, will visit the Philadelphia National Exposition on our behalf, and we trust this event will be the means of extending still further the already important business relations we have with your country. Jamaica being principally an agricultural country, there is no great demand for machinery. The chief articles which are imported here from the States are foodstuffs, coal and kerosene oil; we buy, however, also quite some American hardware, agricultural implements, shoes and cotton goods, and the imports in these lines from the United States are increasing from year to year, to the detriment of English trade.

Amongst the general public there seems to be some prejudice against American dry goods, which in consequence have difficulty in competing with the English standard qualities to which people out here have been accustomed since many years, and which are turned out in the same patterns regularly, while your manufacturers seem to make only limited quantities of a thing and very often can't repeat orders for goods which have met with a fair demand here. In woolen goods English manufactures predominate entirely.

WESSELS BROS. & VON GONTARD.**Westinghouse Brakes Abroad.**

Transmitting a translation of the order requiring all standard Russian railways to equip their freight cars and engines with the Westinghouse air-brake by January 1, 1903, Consul-General Holloway of St. Petersburg writes:

"I desire to state that the Westinghouse Company has erected a fine plant here, equipped with the latest improved American machinery, and is now employing a large force under experienced American engineers. The general manager is Mr. A. Kapteyn of London, who is assisted by Mr. Walter Phillips of Philadelphia, and by American experts in charge of the various departments. This order involves the equipment of 300,000 cars, as well as a large number of locomotives, 60,000 of which are to be fitted with Westinghouse air-brakes and 240,000 with air pipes and couplings inside of three years. This will place all the cars under control of the air-brake, an improvement over the American system of making up trains of freight cars with and without air-brakes, making it impossible to control the cars without the same. Russia is the first country in Europe to use the continuous air-brake for its freight and military trains."

It is reported that Mr. Edgar Smoot, formerly of Durham, N. C., has secured a government contract for construction of harbor works at Manzanillo, Mexico, amounting to \$5,735,760.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

BUILDING BIG MILLS.**The Present Textile Tendency in North Carolina.**

[Special Cor. Manufacturers' Record.]
Charlotte, N. C., September 19.

A very material step in the advancement of the Catawba river water-power project has just been made by Mr. J. M. Odell of Concord and his associates. They have at last secured title to all the lands that they considered necessary, and the checks were passed last week. Purchase money has been paid to Mrs. Alexander, Mrs. Yount and Mr. Sherrill for three tracts of land, which will give the company control of both sides of the river for a distance of four miles. In the purchase are embraced two water-powers, known as Swepson's and Winkler's shoals, which are said to be the finest unoccupied powers available in the State. The company will build a \$250,000 cotton mill, and will put in an electric plant for lighting Hickory and other towns and to supply power for the various manufacturing plants. Later on a main may be laid for supplying Hickory with water.

The Charlotte mills continue to flourish and expand. Talk of more room and increased capacity is heard on all hands. The Piedmont Clothing Co. is to double its capacity, and the Charlotte Clothing Co. is adding fifteen new machines. The Crowley Towel Factory has just placed a new engine, affording a larger capacity, and is now making a greatly-increased output of manufactured goods.

This State now seems to be running to big mills. It is now certain that the proposed \$1,000,000 cotton mill for Gastonia will materialize, and a \$400,000 cotton-mill company has been organized in Durham by Geo. W. Watts, T. B. Fuller, Julian S. Carr and others. North Carolina already holds the Southern record for the number of cotton mills, and expects within the course of two years to lead the whole South in the number of spindles and looms.

Here is an item that will give the Northern and New England people an idea of mill life in the South: The Atherton Mill, at Charlotte, last summer offered four prizes for the best two gardens and best two flower yards in the mill town. The prizes were last week awarded as follows: First, for flowers, Mrs. T. O. Skidmore, \$10; second, Mr. Blackmelder, \$5. First for garden, Mr. T. N. Smith, \$10; second, Mr. C. L. Wilson, \$5.

A party of twenty cotton-spinners from Charlotte and vicinity will attend the Philadelphia Exposition on the 21st, and will afterwards go to New York.

The Round-Lap Bale Abroad.

Hon. Wm. C. Lovering, vice-president of the American Cotton Co., who has returned from a trip to Europe, in an interview says:

"Soon after the fire test of the round bales at Lowell in June I went abroad to look after the interests of the American Cotton Co. I found the Liverpool cotton merchants very much interested in the new system of baling cotton. I also found that the manufacturers were keenly alive to the advantages which the

round-lap bale offered. Everywhere I met with the greatest courtesy and consideration, and I was afforded every facility to present the subject in the most satisfactory manner. I found willing listeners and anxious enquirers. Many of the manufacturers had used the bale with the best results, and were desirous of continuing its use. The trouble has been that the American Cotton Co. did not have cotton enough to give the manufacturer a full supply. But this year, with the large number of presses that have been put into the South, the company will be able to make better deliveries.

"I had an opportunity to meet several of the largest and most prominent spinners of Lancashire, and was able to address them upon the merits of the round-lap bale and the methods of using it. Messrs. Howard & Bullough, who are among the largest cotton-machinery builders in the world, and whose opening machinery is excelled by none, built a scutcher or opening lapper, with an apron adapted to carrying three of the round-lap bales. By their courtesy I invited the cotton spinners to witness the operation of this machine at their works at Accrington. Nothing could have been more successful than this demonstration. The beater handled the cotton with the greatest ease, and the scutcher made an even and well-mixed lap forty inches wide.

"The gentlemen who were present examined the machine and took the greatest possible interest in all its movements. It did its work so well that there was very little that needed explanation. The advantages of using the bale in this way were apparent to every one. The manufacturers were quick to see that with their cotton coming to them in this advanced stage of preparation they would have infinite advantages over those who used cotton in any other form. It was pointed out to them that the cotton itself was cleaner and less knitted or gnarled than cotton in the old square bale, owing to the fact that the method of cleaning the cotton through the lint flue of the round-lap cotton press had removed all of the sand which is ordinarily or often found in cotton.

"This condition of the cotton obviated the necessity of the long dirt flue, which is usually employed in modern mills, the only purpose of which is to remove sand. Otherwise it tends to roll and curl the cotton. The spinners appreciated this feature of the round-lap bale.

"Another advantage was in the admirable way in which the cotton was mixed, the breaker lap containing an equal part of each of the three bales. They saw in this the possibility of obtaining the most perfect mixing that could be had. They expressed themselves as eminently satisfied with the demonstration, and were anxious to adopt the bale at once.

"The time is ripe for this new system of baling cotton. The market is ready to take it, and the only limit is the ability of the company to furnish all the cotton that is required."

Boston Interested at Columbus, Ga.

The projectors of the Columbus Manufacturing Co. of Columbus, Ga., held a meeting last week and effected permanent organization. Boston capitalists have become interested in this enterprise, and they have subscribed for a large amount of stock and will have Mr. Chas. H. Utley of Boston to represent their interests in the management. The officers chosen were F. B. Gordon, president; Charles H. Utley, treasurer; Floyd D. Bullock, secretary; executive committee, Messrs. W. C. Bradley, Rhodes Brown

and E. N. Clemence. The directors are Messrs. W. C. Bradley, Rhodes Brown, O. C. Bullock, E. N. Clemence, E. P. Dismukes and F. B. Gordon of Columbus, Ga.; Charles H. Utley, William H. Wellington, R. P. Snelling and Otis H. Luke of Boston, Mass., and A. Minis of Savannah, Ga. Mr. Stephen Green of Boston is the company's engineer, and he has about completed plans and specifications for the proposed cotton factory. Contracts for machinery and buildings will be awarded soon. The capital stock is \$225,000.

Hosiery Yarns Advanced.

Leading Southern spinners of hosiery yarns met at Charlotte, N. C., on September 14 with twenty well-known commission men from New York and Philadelphia to devise some plan to raise the price of hosiery yarns, which has been too low to afford any reasonable profit. An association of hosiery yarn spinners was formed with Charles K. Adamson of Cedartown, Ga., president, and Mr. Taylor of Kinston, N. C., secretary and treasurer. A schedule of prices for soft-spun yarns a trifle higher than the present market price was made out and adopted. Cotton-mill men were present from North Carolina, South Carolina, Georgia and Alabama.

A \$250,000 Mill Addition.

The Clifton Manufacturing Co. of Clifton, S. C., will expend about \$250,000 to enlarge its plant. The improvements will include the erection of a new building and the installation of 15,000 additional spindles, which will make its total of spindles number 111,792, the looms numbering 3200. Contract for building the foundation for the new structure has been awarded to Messrs. Alex. Gibson and J. C. Cooksey. The work of erection will be commenced immediately. The company's present capital stock is \$1,000,000.

Georgia's Textile School.

When the Georgia School of Technology opens next week it will have seventy-five students in its new feature, the A. French textile school. This department will be under Prof. Wm. N. Randle, a graduate of the Philadelphia Textile School; Prof. Arthur Whitham, who has had practical experience in Lancashire, England, in New England, in New Jersey and South Carolina; Prof. J. C. Kniveton, who has also had English and American experience, and Prof. Charles K. Francis, formerly of Pennsylvania.

Cotton Movement.

In his report for September 16 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that 408,404 bales of cotton have been brought into sight since the beginning of the season, an increase of 169,183 over the same period last season. Exports have been 114,215 bales, an increase of 45,680; takings by Northern spinners were 43,484 bales, an increase of 25,290; by Southern spinners 61,077, an increase of 6000 bales.

To Add 50,000 Spindles.

The Lancaster Cotton Mills of Lancaster, S. C., will increase its capital stock from \$150,000 to \$1,000,000 and add 40,000 to 50,000 spindles; now in place, 10,500 spindles. Orders for most of the machinery have been placed, states the president, Mr. Leroy Springs.

A 20,000-Spindle Mill.

The Ocmulgee Cotton Mills of Macon, Ga., reported recently as incorporated by R. H. Plant, J. W. Cabaniss, A. Block, N. A. Block, George Snowden and others,

will make its capital stock \$500,000 instead of \$100,000, as was intended at first. Arrangements will be completed in the near future for a mill of 20,000 spindles and 1000 looms for the production of cloth.

Textile Notes.

Business men of Oxford, N. C., talk of organizing a cotton-factory company.

The Chamber of Commerce of Raleigh, N. C., will endeavor to locate a knitting mill.

It is rumored at Concord, N. C., that Mr. Charles Wagner will build a knitting mill.

The Enterprise Manufacturing Co. of Coleridge, N. C., is erecting an addition 30x90 feet in size to its cotton factory.

A movement will be inaugurated at Monroe, La., on October 3 for the formation of a cotton-mill company. Mr. A. A. Gunby is interested.

Mr. George U. Borde, New Orleans, La. (office in Liverpool, London & Globe Building), desires addresses of manufacturers of jute-working machinery.

The proposed cotton-factory company at McComb City, Miss., has elected temporary officers. They are Capt. J. J. White, chairman, and T. W. James, secretary.

The Caraleigh Mills Co. of Raleigh, N. C., F. O. Moring, secretary, has declared an annual dividend of 4 per cent. on both its common and preferred stock, payable October 2.

The Clinton (La.) Cotton Yarn Factory has been organized, with Isidor Mayer, chairman, and George J. Ramsey, secretary, to establish a 2000-spindle mill. All the stock has been subscribed.

It is reported that the Crown Cotton Mills of Dalton, Ga., will erect another mill to cost about \$100,000. This company now has 20,000 spindles and 500 looms; capital stock \$163,000.

A \$100,000 stock company has been organized at Social Circle, Ga., to erect a cotton factory. Mr. Joseph Blasingame of Jersey is president, and Mr. Robinson of Social Circle, vice-president.

Mr. George C. Smith, secretary of the Chamber of Commerce at Macon, Ga., states that he has secured subscriptions for about \$80,000 in the proposed co-operative company proposed; capital stock to be \$100,000.

Mr. T. O. Burris of Columbus, Miss., proposes the organization of a stock company to erect a cotton factory. Mr. Burris made a visit to the New England mill districts recently, investigating the cotton-manufacturing industry.

The Crescent Cotton Mills of Rock Hill, S. C., recently noted as to issue \$50,000 of bonds for improvements, has decided to install 8500 spindles, twenty cards, boiler and engine, etc.; plant has now 7904 spindles and 192 looms.

A movement is on foot at Baconton, Ga., for the organization of a cotton-mill company. Messrs. M. E. Jenkins, L. A. Brooks, J. S. Miller, R. J. Bacon, G. H. Reynolds and T. J. Glousier comprise a committee appointed to solicit subscriptions.

The report of State Labor Commissioner Lacy shows that since 1896 the number of children employed in North Carolina cotton mills has decreased 50 per cent., while the number of men has increased 100 per cent., and of women 50 per cent.

Messrs. R. M. Carroll of Blairsville, S. C., and Col. J. R. Ashe of Yorkville, S. C., reported last week as organizing a cotton-mill company, have incorporated the Marie Mills, with a capital stock of

\$50,000. The plant will be located at Hickory, S. C.

The additional building for the La Grange (Ga.) Mills has been completed by the contractors, Messrs. Chapman & Son of Atlanta. It is a three-story structure, and the new 5000 spindles will be put in place by November 1; this gives the plant 10,000 spindles in all.

The Laurel (Miss.) Cotton Mills, recently reported at length as organized, etc., has let contract to a Massachusetts company for supplying the machinery for its factory. Fifteen thousand spindles will be the equipment, with 500 looms. W. B. Rogers promoted this enterprise.

The Ashley & Bailey Co. of Paterson, N. J., has purchased site at Fayetteville, N. C., for the erection of a silk mill. The branch factory will be in the nature of an experiment, and more definite information will be available later on. The erection of buildings for the plant is now in progress.

Mr. J. S. Barrow of Louisburg, N. C., contemplates arranging for the establishment of a cotton-rope and twine factory. Correspondence is solicited concerning this enterprise. Manufacturers of the machinery used in such factories are requested to send catalogues, price-lists and other information.

Mr. E. L. Shuford of Hickory, N. C., proposes the organization of a cotton-mill company. He is now negotiating for the purchase of the Rowe shoals, near Hickory, and if successful in obtaining the ownership of them will develop the extensive water-power available to operate the proposed cotton factory.

A location for a 6000-spindle cotton factory, with suitable building available, is wanted by an experienced Southern cotton manufacturer. It is proposed to manufacture first-class hosiery yarns. Individuals or towns may address "South," care of Manufacturers' Record, and letters will be forwarded.

The Cheswell Cotton Mill Co. of Westminster, S. C., has been incorporated, with capital stock of \$100,000, by Messrs. William E. Cheswell, Campbell Courtney, both of Newry, S. C.; W. P. Anderson and W. J. Carter, both of Westminster, S. C., and C. E. Mason of Toccoa, Ga. The erection of a cotton mill is proposed.

Strenuous efforts are being made at Oxford, N. C., to organize a \$200,000 cotton-factory company, and a large part of the capital has been subscribed. The leading business men are interested in this enterprise, among whom are S. W. Minor, A. A. Hicks and others. Probably the company will start with more than \$200,000 capital.

The Windemere Knitting Mills of Albemarle, N. C., has been incorporated by Messrs. J. W. Cannon, E. C. Barnhardt, J. S. Efird and J. S. Leslie, with capital stock of \$30,000, and privilege of increase to \$50,000. This company was reported at length several weeks ago as to establish mill for capacity of 6000 pairs of hosiery per week.

Messrs. George A. Gray and John F. Love of Gastonia, N. C., reported recently as contemplating the erection of a 25,000 to 50,000-spindle and 1200 to 2500-loom cotton factory have definitely decided to arrange for the erection of the proposed plant. A site has been selected and land purchased. Probably close to \$1,000,000 will be invested in this enterprise.

Leading business men of Fayetteville, Tenn., have secured options on land and water rights on the Elk river, near that city, with a view of industrial developments. They contemplate developing water-power and erecting factories, probably a cotton mill first of all. It has been

estimated that 750 horse-power can be secured at low water at a cost of \$35,000.

A company has been organized at Durham, N. C., for the erection of a \$400,000 cotton mill. Mr. T. B. Fuller is president; George W. Watts, vice-president; Julian S. Carr, Rufus L. Patten and others, directors. Arrangements will be made for an immediate commencement of work on the mill. This enterprise has been in process of formation by Col. Julian S. Carr for some months past.

The Fort Valley (Ga.) Cotton Milling Co. has been organized for the operation of the Springvale (Maine) plant, recently reported as removing to Fort Valley. Mr. Peddicord is now preparing plans and specifications for the building to be erected to accommodate the machinery. The equipment is 10,500 spindles and 300 looms. The capital stock is \$100,000. Capt. J. B. James was the prime mover in securing this enterprise.

The Erwin Cotton Mills Co. of Durham, N. C., has purchased additional land and rights in Chatham county, North Carolina, where it recently bought property for development, as stated in these columns last month. The company will develop water-power to operate a \$250,000 cotton factory which it will erect, to supply neighboring factories and to generate electricity for lighting nearby towns. Mr. B. N. Duke is president.

It is reported on good authority that the American Spinning Co. of Greenville, S. C., will increase its capital stock from \$125,000 to \$350,000, an increase of \$225,000, and erect a new No. 2 mill. New mill reported to be four-story building, 120x250 feet, and machinery consisting of 10,000 spindles and 500 looms, cloth to be the product. Mr. J. H. Morgan, president of the company, when questioned concerning the improvement mentioned, stated he had nothing to say at present.

Coal shipments for the week ending September 9 from the George's Creek-Cumberland region of Maryland and West Virginia aggregated 82,717 tons, and 5387 by way of Chesapeake & Ohio canal, a total of 88,104 tons, 17,441 tons more than for the same week of '98. The total shipments for the year so far are 2,905,527 tons, an increase of 181,343 tons as compared with the corresponding period of 1898.

It is proposed to introduce at the next session of the Virginia legislature a bill for the annexation to Norfolk of the territory between Lambert's Point, Tanner's Creek and the east branch of the Elizabeth river, including Lambert's Point, Virginia City, Huntersville, Barboursville and East Brambleton, adding 20,000 inhabitants to Norfolk.

During the first eight months of this year 1,026,796 tons of pig iron, an increase of 187,354 tons, and 115,115 tons of cast-iron pipe, an increase of 31,528 tons, moved from the Alabama-Tennessee field. The shipments of pig iron to Europe were 127,740 tons, a gain of 38,535 tons over the same period last year.

The output in the Joplin (Mo.) district during the week ended September 9 was 8,425,200 pounds of zinc and 869,200 pounds of lead, valued in all at \$186,941.

The net revenue derived by the State of Virginia from its fish and oyster industries during the past season was \$34,274.

The Alabama Iron Works, recently established at Mobile, will engage in the manufacture and repair of steamship, tug and steamboat machinery, saw-mill fittings, boilers and engines, heavy forgings, architectural iron and brass castings and general boiler-making.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., September 19.

The outlook with regard to cotton oil remains practically unchanged, but prices are hardening. The conditions which rule the market, referred to in last letter, the prospective crop shortage, with its consequent deterring influence on trading, becomes more emphasized as the season advances. The position of new crop continues strong, with holders asking two cents more for prime crude for early delivery than a week ago, the closing range being 18 to 20 cents loose f. o. b. Texas, according to location. For delivery up to and including November, 17 to 17½ cents is freely bid for Texas oil, but owing to the unsettled condition of the Southern market there is very little on offer. The lard market continues its irregular course, although stronger, December lard, Chicago, being quoted at 5.37½ cents. Tallow is strong, with the prospect of a further advance, 4½ to 4¾ cents being the prevailing Chicago prices, with some holders standing out for 4¾ cents. The business of the week in cotton oils declined from that of previous weeks, and for the reasons already mentioned. The seed question is troubling the mills, restricting the possible volume of forward sales unless said sales are adequately covered by seed which commands \$9 to \$10 delivered at mills in all sections.

With seed remaining high current oil prices will hold, the generally favoring positions of competing fats adding further stability to the cotton-oil situation. The position of the market compares favorably with that of a year ago, while on the other side of the Atlantic it is conceded that a shortage of all grades of oil obtains, thus giving promise of active export trading in the near future. The slow exports may be attributed chiefly to the attitude of foreign consumers holding off until the advent of new-crop oil, which is expected to be on the market along in October. It is reported from the West that before producers made last advance in crude oil the Western packers and refiners cleaned up all offerings of oil in the valley at 16 to 17 cents. Concerning the damage to the cotton crop, Texas is not the only State which suffers in this respect, but to just what extent cannot be ascertained with a degree of reliability. Hence the unsettled state of affairs in manufacturing and oil and cake-selling operations. The following are closing prices: Crude, 17 to 18 cents; summer yellow, prime, 25½ to 26 cents; summer, bleaching, 27 to 28 cents; summer, off grades, 25 to 25½ cents; yellow, butter grades, 29 to 30 cents; white, 28 to 30 cents; winter yellow, 30 to 31 cents, and salad oil, 31 to 32 cents. Hull and Liverpool refined oil (England) are quoted at 15s. 9d.

The recent boom in linseed cake and meal for export was of a speculative character, and will probably have a restricting effect on the disposition and consumption of cotton cake and meal, although this may only prove of a temporary character. But very considerable business has already been done by the cotton-oil mills in selling cake and meal, 30,000 tons having been ordered during the past week in Texas and the valley for export. Mr. James Bowman of the firm of G. C. Dobe & Co., Liverpool, England, is now on the Atlantic, the Southern oil mills being his destination. It is prob-

able he will buy from 10,000 to 15,000 tons of cake.

Cottonseed-Oil Notes.

The Fidelity International Co. of Philadelphia on the 13th inst. broke ground for an extensive factory which it will erect at Berkley, opposite Norfolk, Va. The plant will occupy fourteen acres, and will manufacture cotton and cottonseed products.

In the town of Kerens, Texas, cottonseed has advanced to \$9.50 per ton, while in Corsicana, in the same county, seed is selling for \$8.50 per ton. The urgent demand from cottonseed-oil-mill men is advancing the price, which, however, will likely decline shortly when receipts are more liberal.

Receipts of cottonseed at Denison, Texas, have been very light so far this season, and there is an urgent demand from the oil mills. Prices for seed have been steadily advancing, reaching \$11.50 per ton on the 14th, against \$6 per ton at the same date last year. At the ruling price farmers are rushing their seed to market.

The North Carolina Cotton Oil Co. at Hilton, N. C., has been recently making a number of improvements in its plant preparatory to commencing operations for the crushing season. A large engine has been installed and other machinery added. The company expects to have its plant ready by the last of the month. The cottonseed market is opening with a good price, farmers selling at \$9 per ton, against \$7 last season.

The market for cottonseed products in New Orleans is steady, and at the moment higher prices are indicated. Receipts of seed at points of production in Texas are light, and mills are paying as high as \$10 to \$11 per ton. There is some export inquiry for winter-yellow oil, and values are firm for all grades. Cake and meal are selling for export. Shipments of oil for the week ending the 14th inst. aggregated 17,750 gallons, exported to Austria. Receivers' prices for all products are as follows: Cottonseed, \$5.50 to \$6.50 per ton (2000 pounds) on the river bank from New Orleans to Memphis; cottonseed meal jobbing at depot, nominal per short ton and \$20 per long ton for export f. o. b.; cottonseed oil, 10 to 15 cents per gallon for off crude loose f. o. b. in tanks here; in barrels, 12½ to 17½ cents; prime crude in bulk, 14 to 16 cents, and nominal for refined oil at wholesale and for shipment; off refined, 22½ cents; oilcake, 20 per ton f. o. b.; linters—A, 2½ cents per pound; B, 2½ cents; C, 2½ cents; hulls delivered at 50 cents per 100 pounds, according to the location of the mills.

The steel steamer General Hunt, for the United States quartermaster's department, was launched last Monday at the yards of the R. M. Spedden Shipbuilding Co. at Baltimore.

During August 1,505,200 bushels of coal passed down the Great Kanawha river in West Virginia, in addition to lumber, logs, railroad ties, staves, shingles, brick and salt.

A board of trade has been organized at Martinsburg, W. Va., with H. T. Cushing as president; C. A. Miller, secretary, and P. E. Deatrich, treasurer.

It is reported that the quick-silver mines in Presidio and Brewster counties, Texas, will be extensively developed within the next five years.

It is estimated that the trade at Macon, Ga., during the twelve months ended August 31 represented more than \$52,000,000.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

TEXAS YELLOW PINE.

Thousands of Acres of Timber Land To Be Opened.

Houston, Texas, September 11.
Editor Manufacturers' Record:

It is announced that Mr. John H. Kirby of this city has gained practical control of much of the long-leaf yellow-pine timber supply in this State not owned by large lumber companies. The Texas forest formerly embraced nine counties in the southeastern part of the State, but during the past fifteen years consumption has been large, and about 65 per cent. of the original forest has been cut away. The timber that remains is located between the Neches river on the west and the Sabine river on the east. Mr. Kirby has been buying lands in this territory about a year, and it is now announced that he has practical control of all the uncut virgin forest except that which, as stated, is owned by some of the larger lumber manufacturing concerns, and which they hold for their own consumption.

Mr. Kirby is engaged in building a railroad, the Gulf, Beaumont & Kansas City Railway, through this forest. The line begins at Beaumont, and is now in operation to a point seventy-five miles north of Beaumont and about ten miles south of the town of Jasper, with an extension of eighty miles to be put under construction. It divides centrally the territory between the Sabine and Neches rivers, and it is estimated that the area of long-leaf pine timber land to be developed by this line amounts to between 1,200,000 acres and 1,600,000 acres.

In addition to the pine timber in this territory, there is said to be a large amount of oak, ash and hickory, all of which will be made available upon the completion of this railroad.

Mr. Kirby states that his main object in buying up this land was to enable his railroad to do business immediately upon completion. That if the lands were owned by persons who would hold the timber at speculative values it would retard the traffic of the road as well as the development of the country through which the road runs. By acquiring the lands himself he is now able to say to those who desire to manufacture lumber, "here is the raw material, bring on your mills."

Lumber in this territory is now selling at prices practically 100 per cent. higher than prevailed a year ago on everything except railway material. That class of stuff is up only about 30 per cent. above last year's prices, but it is expected that there will be a sharp advance in the near future. The demand for all classes and grades of pine lumber exceeds the supply, though all the mills in this territory are running on full time, and some are running nights.

The acquisition of this timber by Mr. Kirby will, it is claimed, make the Gulf, Beaumont & Kansas City Railway the leading lumber road in this State. Through the ownership of the timber Mr. Kirby will be able to regulate the movement of lumber and keep his road in steady tonnage supply at all times.

Well-informed lumbermen in this section look for a very sharp advance in the price of timber lands. The first-class lands yield an average of about 10,000 feet per acre; stumpage is now selling at \$2 per 1000 feet where the mills pay currently each month for logs consumed during the preceding month. In cases where

the lands, however, are bought outright, the stumpage price is not much over \$1 per 1000. Lands anywhere within ten miles of a railroad are selling at from \$10 to \$18 per acre, and it is believed that prices within a very few years will advance more than 100 per cent., for the reason that the forest area and timber supply is daily becoming more limited, while the demand is constantly increasing.

When the timber supply in the States of Minnesota, Wisconsin and Michigan has been consumed, and which is now known to be fast disappearing, the demand made upon the Texas forests will be perceptibly increased. The mills here enjoy exceptionally favorable rates to the North, for the reason that cars coming to the Gulf from the grain fields of the West must either take lumber back or return empty. In consequence of this condition the freight rate from Beaumont, the center of the lumber territory, to Chicago is only twenty-two cents per 100 pounds. Freight rates to other localities over lines of road radiating from Chicago are proportionately low.

On the whole, the outlook for Texas lumber people is extremely promising.

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,

Baltimore, Md., September 21.

There has been a fair movement in nearly every avenue of the local lumber market during the past week, and the volume of business has been rather above a good average. The demand for air-dried North Carolina pine is quite spirited, and boxmakers and yardmen are good purchasers. Kiln-dried lumber is selling very freely, and all arrivals are quickly taken. Stocks are generally light in North Carolina pine, and under an urgent demand the assortment is not likely to be much better for some weeks to come. The demand for dressed lumber is very much improved, and prices are firm, while planing mills are all busy on orders. In white pine there is considerable business, and values are firm, with stocks fairly well assorted. Cypress is quiet, with a moderate inquiry, and prices unchanged. The hardwood market is firm, with stocks of dry lumber very light. Receipts of green lumber have been heavier during the week, and the demand for all grades continues active, with prices firm. Poplar, ash and oak are all higher, and for desirable stock there is an urgent demand. Furniture men, wagon shops and other woodworking concerns are all good buyers. There is no great volume of foreign business reported, and exporters are not anxious for business while freight rates are so high.

Jacksonville.

[From our own Correspondent.]

Jacksonville, Fla., September 18.

The increase in exports at all Florida ports for the fiscal year just closed has been remarkable, and in the general trade of the east and west coast no port has shown more encouraging signs of prosperity than Jacksonville. The lumber interests of the port are today of primary importance, and during the past year the exports reached 105,000,000 feet of lumber, besides other wood products. Nowhere along the Atlantic coast are to be found better equipped milling plants, and the Cummer Lumber Co., in the erection of its new saw mill, has one equal to anything in the country as to capacity and equipment. The outlook for the ensuing year is very encouraging, and at present the demand for lumber is most urgent. Prices are now firm, and show an advancing tendency, while lumbermen have difficulty in filling orders. With the

Cummer mill and the Bucki Lumber Co.'s mill in operation the output will show a very material increase during the present year. This port is becoming yearly one of greater importance in the way of exports, and recently delayed contracts for continuing work on the jetties have been awarded, and in the near future vessels of greater draft will be able to enter the port. There is an immense country tributary to Jacksonville rich in native woods, and for which the land and timber value is appreciating. Investors have been prospecting for valuable timber lands, and have found in Florida some of the richest belts of virgin forests, which have been purchased and are now in various stages of development. Manufacturers here are extending their operations, and have valuable timber tracts from which they draw their supplies. It is stated that the Crescent Lumber Co. of this city is soon to commence the development of a large tract of timber land near Sanford, in this State, and others in the lumber trade here have various enterprises projected in the near future. Several wood-working concerns from the North are now looking for sites to establish factories, as certain sections of the State abound with ash, hickory and other woods adapted for their purposes. Messrs. Hoopes Bros. & Darlington of Westchester, Pa., are about to locate a branch of their business at Ocala. This firm is one of the largest wheel-manufacturing concerns in the country, and will have all the hickory timber they want for years to come. Lumber freights continue firm, with vessels rather scarce. During the past week the following clearances were reported: Schooner A. B. Sherman for Baltimore with 500,000 feet of yellow-pine lumber; schooner William T. Drumell for Philadelphia with 303,652 feet, and by Clyde Line steamers and sail to New York and Sound ports 1,385,000 feet.

New Orleans.

[From our own Correspondent.]
New Orleans, La., September 18.

In summing up the business of the last fiscal year and the improvements in the commerce and industries of this port the lumber industry seems to have had a remarkable year of prosperity. As in other sections of the country, the trade in all wood products has developed an immense volume of business, while prices have made a corresponding advance throughout the general list of values. The lumber trade of the city proper has been unusually good; the receipts, together with the lumber manufactured in the city, amounted to 168,162,525 feet, against 123,036,626 feet last season; in shingles 43,913,855, against 31,369,000, and in laths 15,977,700, against 9,127,000 last season. The Picayune in its special edition says: "The city's foreign trade for the past fiscal year was as follows: Hewn timber, 8000 feet; logs, in value, \$331,535; boards, deals and plank, 41,804,000 feet; shingles, 416,000; all other lumber, in value, \$376,331; staves, 23,125,466; manufactures of lumber, in value, \$63,449. This represents about 90,000,000 superficial feet of lumber, besides the other items. In staves this port easily leads all others in the United States." The domestic trade of the port has been largely increased during the past several years by the establishment of houses engaged in the industry having their mills at points on railroads terminating here. Large exporting houses engaged in the hardwood trade and drawing their supplies from points in Tennessee, Mississippi, Arkansas and other States are now doing a heavy volume of business with the various markets of Europe. The abundant crops have created a heavy demand for lumber throughout

the agricultural districts, and the unusual movement in all avenues of the lumber industry has caused an advance in the last sixty days of \$3 per thousand feet. At all milling sections along the lines of railroad terminating here stocks are reported light under the urgent demand for lumber. Never before in the history of the industry has there been such activity in all channels of the lumber trade, and it is stated that saw mills in this section have orders away on in 1900 and new ones being filed daily. Extensive improvements in buildings being erected in the city and suburbs, improvements in the drainage system and numerous other betterments in the way of railroads, docks, piers, etc., all unite in creating a big demand for material. In this State, which abounds in rich timber resources, large tracts of timber land are being sold to lumbermen, which will be developed in the near future, and for which largely-advanced prices are being paid. Under present conditions it is safe to say that the business of 1899-1900 at this port will show a marked increase over last year.

Mobile.

[From our own Correspondent.]
Mobile, Ala., September 18.

The new season has opened with fair prospects of a good timber and lumber trade, and exporters are very much encouraged by the outlook. Stocks of timber on the market are now very light, and receipts will not be of much volume for several weeks to come. The demand for sawn timber continues brisk, and values are firm at 12½ to 13 cents per cubic foot, 40-foot basis. There is also a fair demand for hewn timber, of which the supply is very light. Values are firm at 13 to 13½ cents per cubic foot. Hewn poplar is quoted at 12 cents per cubic foot. Pine saw logs are selling at \$5.50 to \$7.50 per 1000 superficial feet. The lumber trade is in a very satisfactory condition at the moment, and the demand active for all desirable stuff. Mills at this and adjacent points have all the orders and more than they can fill for sixty days to come. Prices continue firm, with a hardening tendency. During the past week the following clearances were reported: Steamer Alma for Greenock with 82,104 cubic feet of sawn timber and 20,320 feet of lumber; steamer Zanzibar for Davenport with 147,682 cubic feet of sawn timber and 170,652 feet of lumber, and steamer Tullochmoor for Greenock with 25,524 cubic feet of hewn timber, 173,280 cubic feet of sawn timber and 348,614 feet of lumber. Among the charters reported are the German bark Hovingen, 1399 tons, Pensacola to Buenos Ayres with lumber on private terms; Norwegian bark Australia, 1170 tons, same, option Montevideo at \$13.50.

Lumber Notes.

The Suwanee Spoke & Lumber Co. of Lyon county, Kentucky, was chartered last week, with a capital stock of \$50,000. S. M. Leonard is the principal incorporator.

The receipts of lumber at New Orleans for the week ending the 15th inst. aggregated 1,859,368 feet, and for the season 12,285,400 feet, against 11,245,700 feet last year.

The Indiana & Arkansas Lumber & Manufacturing Co. of Mariana, Ark., was incorporated on the 14th inst., with a capital stock of \$10,000. Albert Deutsch is president.

The lumber shipments out of the Kanawha river, West Virginia, during the month of August aggregated 463,600 feet, railroad crossties 91,800, staves 5600, hoop poles 7575 and shingles 25,000.

A charter was granted on the 11th inst. to the Imperial Lumber Co. of Texarkana, Texas, with a capital stock of \$10,000. The incorporators are W. C. Paxton, Harry Munzesheimer and G. Munze.

The Lima Lumber Co. of Lima, Polk county and Houston, Texas, was incorporated last week, with a capital stock of \$20,000. The incorporators are M. Tackaberry, C. G. Tackaberry and Geo. W. Steiff.

The York & Wadsworth Lumber Co. of Concord, N. C., has been incorporated, with a capital stock of \$50,000. The incorporators are J. C. Wadsworth, N. F. Yorke, C. J. Harris, B. O. S. Miller and H. W. Miller.

The Kyle Lumber Co. and the Queen City Lumber Co. saw mills at Gadsden, Ala., are running night and day and are behind in orders. Every saw mill in a radius of fifty miles of Gadsden is running on full time.

Col. Charles E. Smith of Richmond, Ky., closed a deal last week with Eastern capitalists for 50,000 white oak and 10,000 poplar trees in Perry county, Kentucky. Another deal is pending for 100,000 trees in the same county.

Mayor A. D. Reynolds of Bristol, Va., has purchased the property of the Roan Mountain Iron & Steel Co. in Mitchell county, North Carolina. It comprises 67,000 acres of fine mineral land, 34,000 acres of which is heavily timbered.

The Pee Dee Lumber Co. of Richmond, Va., was incorporated last week, with a capital stock of from \$10,000 to \$50,000. The officers of the company are B. H. Ellington, president; F. Harwood, vice-president, and B. Pollard Cardoza, secretary-treasurer.

The Bridges & McKeithan Lumber Co. of Wilmington, N. C., has established a branch office in Darlington county. The company's plant at Mount Clare is one of the best-equipped plants in the South, and has a daily capacity of 50,000 feet of lumber per day.

The timber market at Pensacola, Fla., is firm, with prices advancing sharply. Sales were reported last week of 1000 pieces at fifteen and one-quarter cents per cubic foot, and later a large lot at fifteen and one-half cents per cubic foot. The supply of timber is quite limited.

Mr. R. J. Wemyss, general land commissioner of the Louisville & Nashville Railroad, has sold to a Western syndicate 325,000 acres of Florida timber lands located in Lafayette, Jefferson, Madison, Taylor and Wakulla counties. The names of the purchasers are withheld for the present.

The plans for the consolidation of chair manufacturers are said to be nearing completion. Options have been obtained on a large number of concerns representing, it is stated, nearly 90 per cent. of the chair business of the country. The name has not yet been decided upon, but that of the Union Chair Co. is generally favored.

It is said that timber lands in Louisiana are selling rapidly and prices advancing. A sale was recorded on the 10th of 6000 acres near Coushatta to the Globe Lumber Co. by Mr. W. H. Howcott of New Orleans. It is reported that this gentleman is about to dispose of 15,000 acres of rich timber territory in Natchitoches and Winn parishes.

Col. Charles L. Bucki, president of the Crescent Lumber Co. of Jacksonville arrived at Sanford, Fla., last week for the purpose of inspecting 400,000 acres of timber land lying adjacent to the upper St. John's river. The Crescent Lumber Co. intends to commence the work of develop-

ment on a large tract of land near Sanford, on the upper St. John's river, as soon as the inspection is completed.

At a meeting of the directors of the Houston Lumber Exchange of Houston, Texas, held on the 13th inst., the constitution and by-laws were adopted and the following officers elected: President, J. M. Rockwell of the M. T. Jones Lumber Co.; vice-president, J. J. Campbell; treasurer, A. J. Schureman of Schureman & Fall; secretary, Charles A. Newning. The operation of the exchange will begin at once.

The lumber trade at Wilmington, N. C., is now showing remarkable activity in all departments. The demand is very decided, and lumber that last fall sold for \$7 to \$10 per thousand feet is now bringing from \$10 to \$18 per thousand. The following are the prices paid for ton timber by Wilmington buyers: Shipping, \$9.50 to \$10 per thousand feet; prime mill, \$7.50 to \$8.75; fair mill, \$6.50 to \$7; common, \$5 to \$6; inferior to ordinary, \$3.50 to \$5.

The large saw-mill plant at Dottin, W. Va., on the line of the West Virginia Central & Pittsburgh Railway, owned by Whitman, Lane & Co. of Philadelphia, Pa., was burned on the 14th inst. The mill included an electric-light plant and had machinery of the most approved pattern. The loss is said to be about \$350,000, partially insured. The main office of the company is in Philadelphia. The mill has been very busy, running on double time to execute orders.

Messrs. Hoopes Bros. & Darlington of Westchester, Pa., after an inspection of the timber section in the vicinity of Ocala, Fla., have decided to locate a branch of their business at Ocala. The firm is one of the largest wheel-manufacturing concerns in the North, and in the selection of this site will have an abundance of hickory and other woods suitable for their purposes. The hickory logs will be cut into proper lumber for shipment to the factory in Pennsylvania, spokes turned out and the lumber seasoned before shipment.

At a meeting of the Baltimore Lumber Exchange held on the 13th inst. Mr. Lewis Dill, president of the exchange, and Mr. Richard W. Price were named as delegates to the commercial congress to be held in Philadelphia in connection with the national Export Exposition. The lumber exchange will have an exhibit at the exposition, including specimens of rough and manufactured lumber principally handled in Baltimore. New members admitted to the exchange at the meeting were George Helfrich & Son, H. E. Cook & Bro., Sterling West Co. and I. Van Hall.

Contract for the construction of the lock and dam across the Black Warrior river at Tuscaloosa, Ala., was awarded last week. The successful bidders were Messrs. Willard & Cornwell of Tuscaloosa, their price being \$163,000. It will require two years to complete the work.

At the meeting of the State commissioners of agriculture at New Orleans, September 20, cotton factorics as an aid to cotton fields and industrial education in public schools will be among the topics discussed.

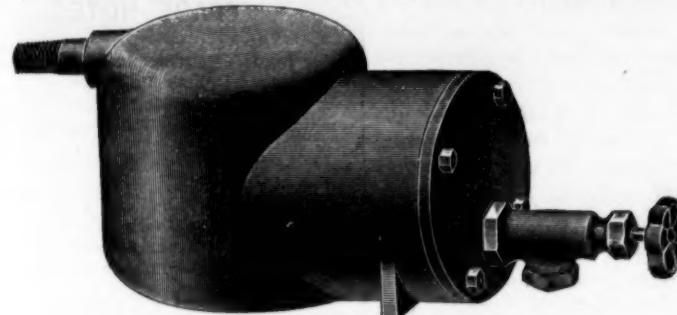
The Manufacturers' Co-operative Association has been organized at Nashville, Tenn., with A. E. Hill, president; R. H. Bransford, vice-president, and J. P. Brennan, secretary and treasurer.

The output in the Joplin (Mo.) district during the week ended September 17 was 7,334,820 pounds of zinc and 988,050 pounds of lead, valued in all at \$161,980.

MECHANICAL.

Cook Steam Trap.

This improved trap is claimed to embrace all the features of the more expensive traps, at the same time being so simply constructed and so easily accessible for repairs and inspection it will meet the approval of all who use it. It will be seen that the trap operates with a

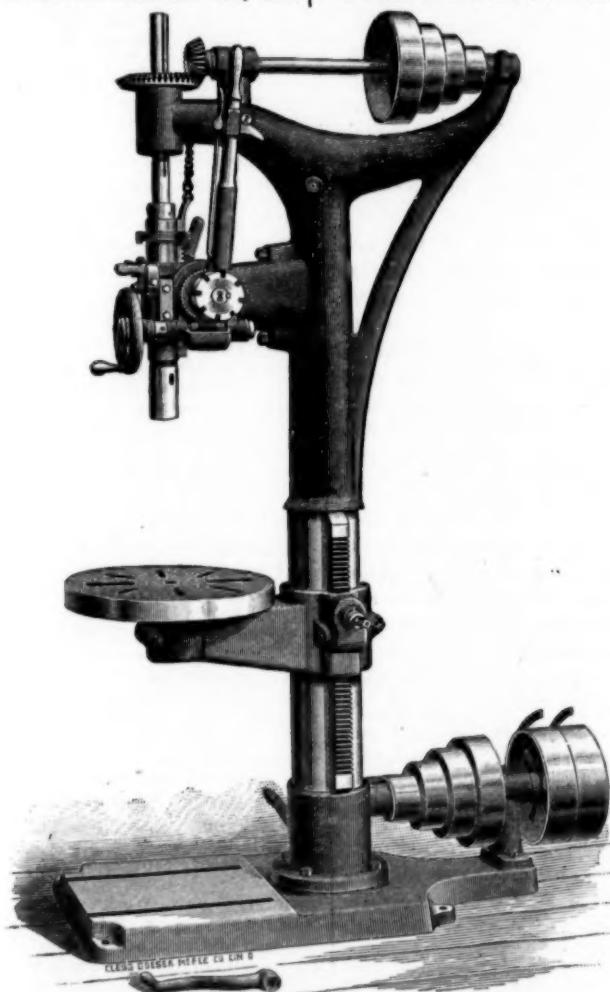


THE COOK STEAM TRAP.

float balance valve; this valve being balanced permits trap to work under both high and low steam pressure. The floats in this trap are seamless, and have all been tested to 300 pounds pressure. It will also be noticed that the valve is a combination blow-off and discharge valve, the valve stem entering the valve chamber pressed against the outer end of valve and by screwing same in raises valve from seat and allows trap to be blown out through the main valve, thereby cleaning same from any grease or sediment which may have accumulated.

The entire internal mechanism can be taken out by removing cap from end of trap. It will be seen there are very few

wheel, and runs in a large worm box, which allows the worm to run in oil continually. The worm boxes on all our drills are arranged to drop, to disengage the worm and worm wheel. This movement is brought about by a new and simple device operated with neat, conveniently-placed levers in the front of the head, and is adjusted so that the worm and worm wheel are engaged to the proper depth at all times, preventing any breaking of teeth in the worm wheel. This arrangement is substantial and positive, and will not get out of order. All racks and gears are cut from the solid. The head is split so as to take up the wear of the sleeve. The ratchet pin



21-INCH HEAVY PATTERN UPRIGHT DRILL.

parts to this trap, making it simple and effective.

For further details write the manufacturer, the Standard Gauge & Manufacturing Co. of Cleveland, Ohio.

21-Inch Heavy Pattern Upright Drills.

The drill illustrated has a table vertically adjusted on the column by means of a worm and worm gear, in connection

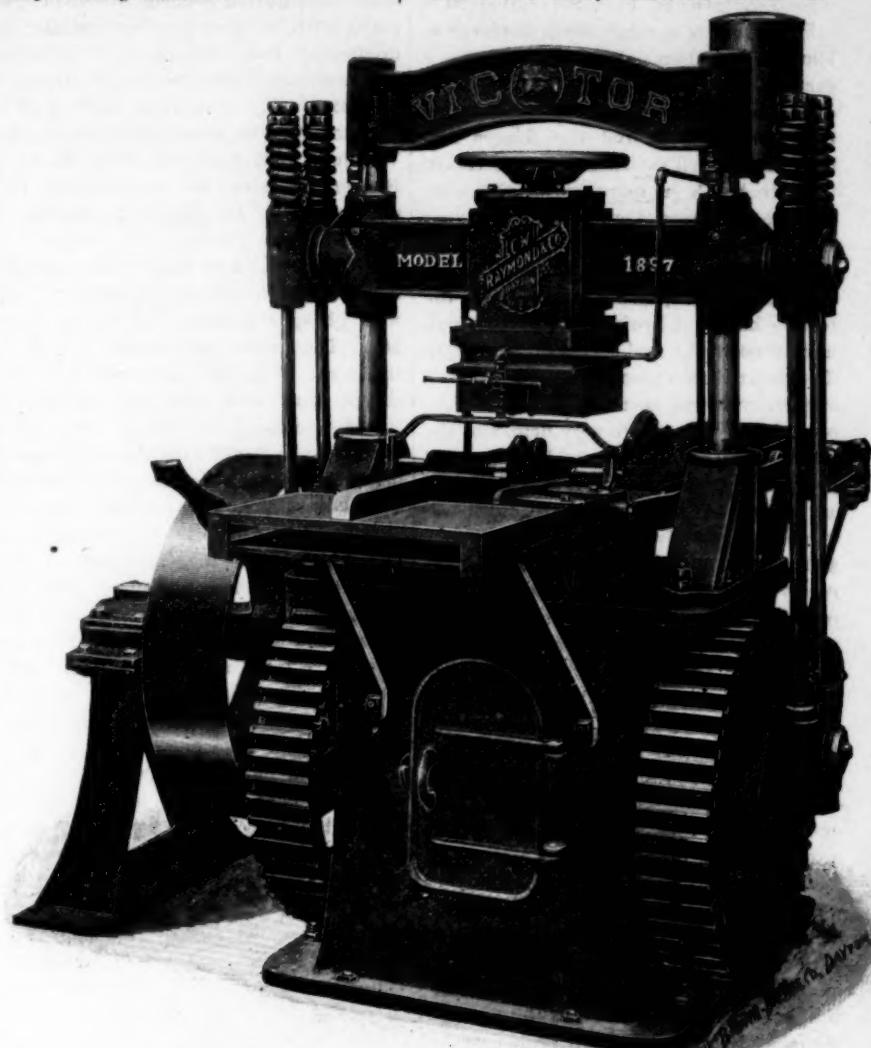
with a rack and pinion, which feature keeps the table in the desired position at all times, and without locking the table by means of the clamping screws, prevents the table from dropping. This arrangement also enables the operator to adjust the table to any height. The table can be swung entirely around the column, leaving the base-plate free for larger work. The worm operating the spindle of the drill is placed below the worm

Special clamping screws are used in the table ars, so as to give greater service than the ordinary cap-screws generally used. One wrench fits all parts needing adjustment by these means. The drill is made standard in all its parts, and is designed to meet the requirements of a work-producing machine.

Lubricating Metal.

It is not worth while at this day to discourse upon the value of lubricating metals, for the wide usage which they now receive is ample testimony of their value.

There are many different makes of



PERFECTION IN MACHINE ILLUSTRATION.

For further details address the maker, the Cincinnati Machine Tool Co. of Cincinnati, Ohio.

Perfection in Machine Illustration.

The great amount of advertising done by the mechanical trades is hardly appreciable by those not connected in some manner with mechanical industries. Yet advertising by means of catalogue, price-lists, folders, regular cards in the trade publications, or by means of illustrated descriptions of machinery in the trade journals, is most extensively conducted.

One of the most important features of trade advertising, it will be readily admitted by those engaged in it, is the appearance of the illustrations used. To secure this appearance perfection in the electrotype is necessary. We present herewith an illustration of a machine, the various details of which are shown with a prominence that could hardly be excelled, the electrotype from which the impression is taken being the work of the Brown-Bierce Co. of Dayton, Ohio. In the conduct of its specialty this company has met with a success that is the reward of painstaking care, the use of the best material obtainable in the market and the most proficient of skilled workmen, combined with an experience that has entered with thoroughness into every line of illustrating.

The Brown-Bierce Co. acts as designer, illustrator, engraver by all methods, and electrotyper; fine catalogue illustrating is given every possible attention. Correspondence solicited from parties contemplating placing orders in this line.

lubricating metal on the market, one of which attention is called to by our illustration. This metal has met with a most extensive patronage, and its merits are constantly increasing the demand for it. Reference is made to the product of the Perfect Lubricating Metal Co. of Cincinnati, Ohio. This product is a phosphorized tin "graphite" metal, which re-



quires great skill and art to manufacture. It is made from the best new material, will stand any strain, will not dress, allows the bearings to run cool, and its maker guarantees it to give best satisfaction and highest economy.

A trial of this metal is invited by the company.

In The Century for October announcement will be made of the names of the three winners of the prizes offered for the best poem, essay and story submitted in competition by American college graduates of 1898. Last year all the prizes were won by alumnae of Eastern women's colleges; this year's winners are Westerners, and only one of them is a woman. The prize story, entitled "Only the Master Shall Praise," is by Mr. John M. Oskison of Vinita, Indian Territory, B.A., 1898, of Leland Stanford Jr. University at Palo Alto, California, who is by birth part Indian.

Improvements costing \$400,000 are to be made by the government on the Kentucky river near Valley View, Ky.

PHOSPHATES.

PHOSPHATES OF FLORIDA.

The Industry Has a Gradual Upward Tendency.

[Special Cor. Manufacturers' Record.]
Ocala, Fla., September 20.

Phosphate is a very active industry in Florida, but there is no boom. It has a gradual upward tendency. The business done so far this year has been larger than ever before, and the miners and brokers are well satisfied with the result.

There has been more prospecting during the past year than during any year since the discovery of the rock. This prospecting has been official and on an intelligent and systematic plan, and the results have not brought to light enough new deposits to add a year's supply to the present known supply.

In view of the small discoveries made, prices of phosphate are very firm, and the larger holders of rock and owners of phosphate property are very indifferent as to contracting for forward sales, reversing the relative attitude of the miner and foreign buyer as it existed a few years ago. While the increased price of rock has induced the erection of several new plants in different parts of the phosphate field, they are for the most part erected on small deposits, and will not add very materially to the permanency of the production. The demand for rock, both at home and abroad, is certainly increasing, and unless some large deposits of high-grade rock are discovered in the near future in other quarters, the prices will slowly advance for some time yet.

There is a brisk demand for phosphate lands, and those who have been so fortunate as to have both a good deposit and to have held onto their lands are now finding ready buyers, and at good figures. Many of these tracts have been sold or contracted for during the past month. The deposits of rock on this character of land, and, in fact, such is the case to a large degree all over the phosphate section, are small pockets, and are soon removed; those nearest to a railroad are the ones now being operated. A short spur is constructed into the deposit and a portable or cheap plant is erected, and when the deposit is removed the plant is torn down and with the machinery and track is moved on to the next deposit. Of course, there are many extensive plants erected in the most approved and expensive style, and the companies, in addition to the thousands of tons already removed, have enough rock in sight to run them for a long time yet.

Labor is none too plentiful, and the wages paid are very fair. Every able-bodied laboring man who applies at the mines for work is given something to do. These conditions apply also to pebble phosphate, which begins from about the parallel of Bartow and extends to near Punta Gorda, though largely in or near the streams, where it is removed with dredges.

The shipments of phosphate from Florida this year have been enormous, and the money circulated through all channels has gone largely to replace the losses of the people on account of the great freeze of 1895. In fact, money has not been so plentiful in Florida and labor so much in demand since that date as now. This happy condition of affairs, however, is not wholly due to the phosphate industry. Heavy demands and good prices for lumber and naval stores have had not a little to do with it. It might be said in this connection that the output of yellow pine and cypress lumber from Florida has been greater than in past years, and the price has advanced about one-third

over the prices obtained three to five years ago.

Phosphate Markets.

Office Manufacturers' Record,

Baltimore, Md., September 21.

The market for phosphate rock has been quiet during the past week, in sympathy with the tone in other fertilizer ingredients. Sales are reported at ruling prices in both Tennessee and South Carolina rock. The following charters were reported for the week: British steamer Westhall, 1832 tons, from Port Royal to Birkenhead with phosphate rock at 17½; schooner Nat Meader from Richmond, Me., to South Amboy with fertilizer at \$1.15, and steamer Kong Haakou, 1471 tons, Charlotte Harbor to King's Lynn with phosphate rock at 23½, early October. The market at mining sections in the great Southern phosphate belt continues firm, with continued activity in the development of the product. The movement in South Carolina continues to improve, and the demand, both foreign and domestic, is good, while prices are very steady. Advices from Florida show fair shipments for the present month, and in all sections miners are busy. The various phosphate companies engaged are prospecting for new deposits, and while there have been no very rich finds made, yet the indications are good for considerable new working territory. Hard rock and pebble are both in good demand from foreign sources, and holders of rock are asking outside figures before making new contracts. In the Tennessee phosphate field the most intense excitement prevails in Maury and other counties where phosphate rock has been discovered. Large deposits of rich phosphate are being found daily near Richmond, Tennessee, and options have been taken on nearly all of the property within a radius of two miles of that place. At Mt. Pleasant the various companies have been improving and enlarging their plants, and are prepared for a most active campaign during the fall and winter months. Prices for rock are firm and hardening, with a brisk inquiry from foreign and domestic sources.

Fertilizer Ingredients.

There has been a moderate inquiry during the week for leading ammoniates, and the market is quiet. The demand from the South is very light, but manufacturers are making some inquiry, and a fair demand from that source is expected soon. Eastern buyers are not in the market to any extent. Dried blood and tankage are steady, and bone meal firm. Sulphate of ammonia is firm, with a hardening tendency.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).	\$3 12½@	3 15
Nitrate of soda.....	1 70 @	1 72½
Blood	1 97½@	2 00
Hoof meal.....	1 70 @	1 75
Azotine (beef).....	1 95 @	2 00
Azotine (pork).....	1 95 @	2 00
Tankage (concentrated).....	1 65 @	1 67½
Tankage (9 and 20).....	1 70 & 10@1 75 & 10	
Tankage (7 and 30).....	17 00 @	17 50
Fish (dry).....	20 00 @	
Fish (acid).....	12 00 @	

Phosphate and Fertilizer Notes.

H. G. Hazard of Ocala, Fla., has purchased and will develop phosphate lands in Leroy county, erecting a plant.

The average daily shipments of phosphate rock from Mt. Pleasant, Tenn., so far this month amount to eighty carloads, representing about 2500 tons.

The shipments of Tennessee phosphate rock from the port of Pensacola, Fla., for the week ending September 11 amounted to 5749 tons, all for European ports.

The British steamship Nethergate was cleared last week by the Gulf Transit

Co. from Pensacola, Fla., with 2000 tons of Tennessee phosphate rock and other cargo for Genoa.

The Jackson Phosphate Co. of Mt. Pleasant, Tenn., has a large force of hands engaged in mining rock, building sheds and grading for the spur tracks which are to be put in immediately.

The Georgia department of agriculture has received its annual fertilizer bulletins from the publisher containing the analysis of between 1000 and 1200 samples of fertilizers shipped into the State during the past year.

The shipments of fertilizers for the fiscal year of 1898-99 from Charleston, S. C., aggregated 332,912 tons, Port Royal 34,500 tons, and from Savannah 90,000 tons, making a total of 457,412 tons for the year.

The Norwegian steamship S. Karpano arrived at Port Tampa, Fla., on the 13th inst. and commenced to load 2400 tons of phosphate rock from the Holland Phosphate Co. The British steamship Chemington arrived at quarantine on the 14th inst. and commenced to load a cargo of phosphate rock on the 16th for a European port.

The new plant of the Tennessee Phosphate Co. on the Jackson place in the Mt. Pleasant phosphate field in Tennessee is nearly completed. The company has a number of contracts from foreign companies to fill, and although it has recently doubled its capacity, it is running both day and night to fill orders. The company has about 2000 hands employed.

The Maury County (Tenn.) Democrat, in commenting on the phosphate industry of Tennessee, says: "It is estimated that 5000 men are already engaged in the phosphate mines of Maury county. The output this year will probably be 600,000 tons. The pay-roll of the county will amount now to about \$2,000,000 a year. Nearly a million dollars' worth of phosphate lands have been sold in the county this year."

The American Agricultural Chemical Co., which operates several fertilizer plants in Baltimore, has declared a semi-annual dividend of 3 per cent. on the preferred stock. The dividend is payable on October 1, and transfer books will close on September 25, to reopen on October 5. The company's statement to stockholders is expected to show that the company has earned 4 per cent. on the common stock above the dividend on the preferred.

A rumor has been current during the past week that the Virginia-Carolina Chemical Co. has purchased the Georgia Chemical Works, which include the only fertilizer works in Augusta, Ga., and the fertilizer plant and mines at Pon Pon, S. C. At the office of the company at Richmond, Va., officials declined to either affirm or deny the rumor. In fertilizer circles, however, the sale is believed to have been closed, the details of which will be announced in a few days.

The stockholders of the Navassa Guano Co. of Wilmington, N. C., held their annual meeting in that city on the 13th inst. Mr. F. Whittle of Petersburg, Va., was called to the chair, with Col. William L. De Rosset as secretary. The annual reports of President Borden and Treasurer De Rosset were submitted, which showed a satisfactory condition of the company. The usual dividend to the stockholders was declared out of the earnings of the company, payable on and after September 15. The following board of directors was elected for the ensuing year: S. T. Morgan, S. D. Crenshaw of Richmond, Va.; F. Whittle of Petersburg, Va.; F. B. Daney of Norfolk, Va.; L. A. Carr of Durham, N. C.; W. M.

Morgan of Fayetteville, N. C.; C. E. Borden, C. W. Worth and Col. William L. De Rosset of Wilmington, N. C. After the transaction of routine business the meeting adjourned. The board of directors then met and elected the following officers: President, C. E. Borden; secretary and treasurer, Col. William L. De Rosset, and superintendent, H. W. Malloy.

TRADE NOTES.

For Roofs.—Contract has been awarded to the Asphalt Rubber Paint Co. of Washington, D. C., for covering the roofs of the exposition buildings in Philadelphia.

For Lumber Mills.—Messrs. Toland & Son of Baltimore, Md., have been appointed agents for their city and vicinity for the product of the Southern Saw Works of Atlanta, Ga. A further reference is made to this Southern manufactory in another place in this department.

Will W. Dodge.—The Dodge Manufacturing Co. of Wishawaka, Ind., announces, with deepest regret, the untimely death of its treasurer, Mr. Will W. Dodge. Mr. Dodge has been identified with this company since its organization, and was a large contributor to its success and prosperity.

Paragon Boilers' Popularity.—As the merits of the Paragon boilers become better known among users orders for their manufacture increase with Mr. M. De Puy, patentee, 19 South street, New York city. Mr. De Puy has closed a number of contracts lately to supply tugs, yachts and Western river steamers. Reducing fuel bills one-half is the especial claim of this boiler.

Cotton-Manufacturing Opportunity.—The fact that the South is now conceded to be the natural habitat of the manufacture of cotton goods should interest prospective investors in the advertisement of Mr. J. S. Hodges in this issue. Mr. Hodges is assignee for the Hartwell (Ga.) Cotton Mills, and will offer the property for sale at public auction on October 3. Write for particulars.

More Flour Mills.—There is no abatement of activity in the erection of flour mills throughout the country. The prominent manufacturers of flour-milling machinery are daily filling orders for complete mills. The Nordyke & Marmon Co. of Indianapolis, which makes the swing-sifter system of milling, filed many good contracts lately. Its orders came from all parts of the country, including Canada.

To Lease Brown Hematite Ores.—In the development of the natural industrial resources of the South present activity frequently offers an opportunity for the investor that must be quickly availed of. One of these opportunities is offered by the Tellico Slate & Iron Co. of Tellico Plains, Tenn., which wants to lease its tract of hematite brown ores, which have a furnace test of 48 per cent. (See advertisement.)

Schooling by Correspondence.—The annual convention of the National Association of Letter Carriers was held in Scranton, Pa., on Labor Day. The International Correspondence Schools is located at Scranton, Pa., and took advantage of this occasion to invite an inspection of its extensive institution by the letter carriers, who handle its mail in all parts of the country. The entire force of instructors, textbook writers, correspondents, etc., numbering over 500 people, were at their desks. The building utilized by the schools was erected especially for its purpose at a cost of \$250,000. The visitors included the postmaster-general, Charles Emory Smith.

Southern Saw Works.—"Patronize home industries" is good advice, and especially in the case of the South is this to be applied. The extent of the South's lumber-manufacturing industries in its various departments is now well known to the world, and it can be well imagined that many hundreds of thousands of dollars' worth of machinery is needed to supply the multitude of mills throughout the section. The Southern Saw Works of Atlanta, Ga., manufactures a complete line of the saws used in lumber milling, and invites inspection and trial of its product, which is claimed to be unsurpassed. The company is operated by Southern men and capital, employing Southern workmen and salesmen, the cases in which its saws are packed are made of Southern pine, oil and ochre and hauled by a Southern "nigger" and a mule. Users of saws should have a copy of this company's catalogue.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD
 seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Anniston—Rolling Mill.—J. K. Dimmick has interested a number of rolling-mill men of Cleveland, Ohio, and Fort Wayne, Ind., in the Anniston Rolling Mill plant, now idle. Option has been secured on the plant, and if it is purchased the interested parties will enlarge, improve and operate it.

Anniston—Brick Plant.—J. H. Duke is establishing a brick-manufacturing plant, with daily capacity of 10,000 bricks.

Birmingham—Cast-iron Pipe Works.—The Dimmick Pipe Co., reported last week as organized to build a 100-ton cast-iron pipe works, has chosen D. R. P. Dimmick of Anniston, president; James Bowron of Birmingham, vice-president; Miss Charlotte B. Blair of Anniston, secretary. The company will locate either at Birmingham, Anniston or Bessemer. Specifications for plant are being prepared and bids will be asked soon for buildings and special machinery; completed plant will employ 250 to 300 laborers.*

Birmingham—Mattress Factory.—The Perfection Mattress Co. will double the capacity of its factory.

Birmingham—Overall Factory.—Albert George and W. D. Trueblood of Knoxville, Tenn., have formed the Birmingham Manufacturing Co. for the establishment of an overall factory in Birmingham. An equipment of new machinery will be installed.

Birmingham—Sash, Door and Blind Factory.—The Halle Manufacturing Co., recently organized in Chicago, Ill., with a capital stock of \$15,000, will establish a sash, door and blind factory at Birmingham.

Montgomery—Rubber-tire Company.—Jacob Griel, J. D. Griel and P. A. Travis have incorporated the Montgomery Rubber Tire Co., with a capital of \$1000 for the purpose of dealing in rubber tires, putting them on vehicles, bicycles, etc.

Pratt City—Coke Ovens.—The Tennessee Coal, Iron & Railroad Co., J. Bowron, vice-president, Birmingham, Ala., reported last week to erect 300 additional coke ovens at Pratt City, states that it is erecting 100 coke ovens at the present time, and will probably build more when these are completed.

ARKANSAS.

Batesville—Cotton Compress.—The Bates-

ville Compress Co. will install new ginnery and two round-lap-bale presses.

DeWitt—Electric-light Plant.—R. A. Houston will erect an electric-light plant, as previously reported.*

El Dorado—Mercantile.—Chartered: The Union Dry Goods Co., with a capital stock of \$10,000; S. G. Lake, president; H. C. Johnson, vice-president; J. W. Henry, secretary.

El Dorado—Electric-light Plant and Water Works.—The city will issue \$14,000 of bonds for construction of water works and electric plant to cost \$15,000. A. L. Dyke, Hope, Ark., is preparing plans and specifications. Address for particulars H. W. Miles, secretary board of improvement.

Johnson—Lime Works.—The Crescent White Lime Works has been incorporated, with a capital stock of \$10,000, and W. L. Stuckey, president; F. O. Gulley, secretary, and H. K. Wade, treasurer.

Mammoth Springs—Zinc Mines.—John Reese has sold his zinc claims for \$4000 to parties who will develop extensively.

Marianna—Lumber and Manufacturing Company.—Albert Deutsch, George E. W. Luehrmann and Charles G. Hille have incorporated the Indiana & Arkansas Lumber & Manufacturing Co., with a capital stock of \$10,000.

Morrillton—Cotton Compress.—The Moose Gin Co., reported last week as incorporated, is erecting two American Cotton Co.'s round-bale cotton compresses, one at Morrillton and the other at Plumerville, Ark. The Morrillton plant is a six 70-saw outfit and cost \$12,000, and the other a four 70-saw outfit and cost \$8000; capacity 200 bales every ten hours.

Plumerville—Cotton Compress.—See item under Morrillton, Ark.

FLORIDA.

Gainesville.—The Gainesville Fertilizer Works, lately reported as organized, will next spring install new machinery, including boiler and engine, and increase the capacity.*

Jacksonville—Artificial-flower Factory.—W. G. Clare of Clare & Sharrath, manufacturers of prepared palms, foliage, flowers and feathers, New York, N. Y., is investigating with a view of establishing such a factory in Jacksonville, and will probably remove the plant now located at Orlando, Fla., to this city.

Lake Mary—Elevator and Telephone Line.—The Planters' Manufacturing Co., F. G. Perkins, president, will erect a grain elevator at Lake Mary and construct telephone line to Sanford.

Ocala—Wheel Factory.—Thomas Hoopes, of the wheel-manufacturing company of Hoopes Bros. & Darlington, Westchester, Pa., will establish a branch factory at Ocala.

Punta Gorda—Ice Plant.—The Punta Gorda Ice & Power Co. has increased its capital stock, as reported recently, for the purpose of installing a 12½-ton-per-day ice plant. Machinery and supplies have been contracted for and plant is being erected.

Sanford—Palmetto-sheathing Factory.—C. L. Goodhue has received contract to erect the plant for cutting palmetto sheathing, lately reported to be erected by C. W. Kenyon & Co. of Tampa, Fla.

Sanford—Machine Shop.—The Tropical Fiber Co. has established a toolroom and machine shop.

St. Augustine—Electric Lights and Water Works.—The Miami Power & Water Co. has been incorporated, with a capital stock of \$50,000, to construct and operate electric plants and water works.

Tampa—Cigar Factory.—The United States & Havana Cigar Co. has been incorporated and will consolidate fourteen cigar factories which will have an annual capacity of 180,000,000 cigars; capital stock \$15,000,000. Isadore Hershheimer of New Orleans, La., is president; Edward Manrara of Tampa, vice-president, and Eugene Vallens of Chicago, managing director.

GEORGIA.

Athens—Cotton Compress.—Capt. J. H. Rucker has established a round-bale cotton compress.

Augusta—Bobbin Factory.—Charles Warren Davis and Walter G. Lynch will, it is reported, organize a \$25,000 company for the establishment of a bobbin and shuttle fac-

tory with a capacity of 25,000 per day. It is also stated that an option for the purchase of the Bishop Bobbin Works at Harrisburg has been secured; this plant has a capacity of from 10,000 to 15,000 bobbins daily.

Augusta—Hardware Company.—Maurice Walton and John Moore have incorporated the Maurice Walton Hardware Co. to conduct general hardware business; capital stock \$30,000.

Augusta—Bridge.—The Southern Railway Co. will erect an iron and steel bridge across the Savannah river at Augusta; Frank S. Gannon, general manager, Washington, D. C.

Augusta—Carriage Shops.—Day & Tannahill have awarded contract for the erection of a three-story brick building to be used as carriage shops; elevators will be put in.

Baconton—Cotton Mill.—M. E. Jenkins, L. A. Brooks, J. S. Miller, R. J. Bacon, G. H. Reynolds and T. J. Glouster have been appointed a committee to solicit subscriptions for the erection of a cotton mill.

Bainbridge—Ice Factory and Electric Plant.—The Thronateeska Ice, Light & Power Co. will increase the capacity of its plant by installing a 10 to 15-ton ice machine and a 75-kilowatt alternating dynamo and a 50-kilowatt power generator.*

Coffee County—Timber Land.—McLeod & Warren, lumber manufacturers, have purchased 7500 acres of timber land in Coffee county and will probably develop it.

Columbus—Wharf.—The city will repair its wharf at a cost of \$4000, as reported last week; contract awarded to E. F. Shatner.

Columbus—Cotton Mill.—The Columbus Manufacturing Co., reported as incorporated several months ago, has organized with F. B. Gordon, president; Chas. A. Utley (of Boston, Mass.), treasurer, and Floyd D. Bullock, secretary. Stephen Green of Boston has prepared plans and specifications for proposed cotton mill; company's capital is \$225,000.

Dahlonega—Gold Mine.—F. F. Walcott, William O'Neal of Toledo, Ohio, and C. D. Miller of Huron, Ont., have purchased and will develop gold mine at Dahlonega.

Dalton—Cotton Mill.—The Crown Cotton Mills will, it is reported, erect a new \$100,000 cotton mill; present equipment 20,000 spindles and 500 looms.

Fort Valley—Fruit-package Factory.—The Georgia Fruit Package Co. has recently increased its capital stock 150 per cent.

Fort Valley—Cotton Mill.—The Fort Valley Cotton Milling Co. has been organized, with a capital stock of \$100,000, and Architect Peddicord is preparing plans for erection of building; this company has been organized for the operation of the Springvale (Maine) cotton mill, recently reported to be removed to Fort Valley; plant has 10,500 spindles and 300 looms. This mill has been located through the efforts of Capt. J. B. James, who may be addressed for particulars.

Macon—Cotton Mill.—The Ocmulgee Cotton Mills, lately reported as organized by N. A. Block, George Snowden, J. W. Cananiss and others, with a capital stock of \$100,000, has decided to increase its capital to \$500,000 and to install 20,000 spindles and 1000 looms.

Macon—Cotton Mill.—George C. Smith, secretary Chamber of Commerce, has secured \$80,000 worth of subscriptions to his proposed \$100,000 co-operative company.

Nichols—Saw Mill.—The Southern Pine Company is erecting large mill.

Rome—Fire-engine Company.—P. H. Vandiver and others have incorporated the Mountain City Steam Fire Engine Co., with a capital of \$500.

Savannah—Contracting Company.—The Seaboard Contracting Co. has been incorporated for the purpose of engaging in dredging, bridge, dock and wharf building, construction of railways, terminals, etc.; capital stock \$50,000.

Social Circle—Cotton Factory.—A company has been formed, with Josiah Blaessengame of Jersey, president, and Mr. Robinson of Social Circle, vice-president, for the establishment of a cotton mill; capital stock \$100,000.

Sylvania—Planing Mill and Ginnery.—O. C. Everett will rebuild his planing mill, recently reported burned; will also erect a ginnery.

Warrenton—Cotton-oil Mill.—The McBurden Oil & Fertilizer Co. has established a \$30,000 cottonseed-oil mill; L. G. Neal, manager.

KENTUCKY.

Ashland—Laundry.—George Eversole of Huntington has established a steam laundry in Ashland.

Bowling Green—Corn Mill.—Jas. Skaggs & Son will install a large roller corn mill.

Bowling Green—Flour Mill.—Dr. Blakely contemplates installing the roller system.

Bowling Green—Crate Factory and Saw Mill.—The Kentucky Folding Crate Co. is making extensive improvements to its plant, and will add a saw mill.*

Cumberland Falls—Electric-power Plant.—The Cumberland Falls Power Co. has organized, with a capital stock of \$500,000 and C. W. Banta, president; L. H. Morgan, Louisville, Ky., treasurer; James C. Allin, Louisville, secretary, for the purpose of erecting an electric plant at a cost of \$150,000.

Eddyville—Spoke and Lumber Company.—Chartered: The Suwanee Spoke & Lumber Co., with a capital stock of \$50,000, by S. M. Leonard and others.

Glencoe—Flour Mill.—William Wales & Son of Mound City, Ky., have purchased the flour mill of the Glencoe Milling Co. and will expend \$1000 in new machinery.

Hartford—Tobacco Stemmer.—G. W. Martin & Co., Sacramento, Ky., will establish a tobacco stemmer at Hartford.

Lancaster—Water Works.—The city will hold an election November 7 to decide the issuance of \$14,000 of bonds for construction of water works. Address Mayor Kinnaird.

Louisville—Varnish Factory.—T. Trammell will erect a three-story brick building to cost \$3750, to be used as a varnish factory.

Louisville—Distillery.—Chartered: The Haldrick-Callaghan Co., to conduct a general distilling and liquor business, by J. Rosenbaum, R. G. Shipman, H. F. Spooner, all of New York city; capital stock \$4000.

Louisville—Tobacco Factory.—E. Rice and Owen Rice of Greenville and Henry A. Vaughan of Louisville have organized as Rice & Vaughan and will erect a three-story brick tobacco factory 200x300 feet. Address Room No. 406 Columbia Building.

Morgantown—Corn Mill.—H. R. Gibson will install a roller corn mill.

Paducah—Coal Mines, Elevators, etc.—See item under Uniontown.

Paducah—Round-house.—The Illinois Central Railroad Co. is surveying ground for a \$30,000 round-house to be added to the old one at Paducah; J. T. Harahan, second vice-president, Chicago, Ill.

Pineville—Oil and Mineral-land Development.—Michigan capitalists have incorporated the Laurel Fork Land Co., with a capital stock of \$100,000, for the development of oil and mineral resources.

Pineville—Coal Mines.—The Pineville Coal Co., R. Holmyard, general manager, will develop new coal mines, as reported recently, but has made no definite arrangements; will probably need some new machinery.*

Richmond—Cigar, etc., Factory.—The Central Kentucky Cigar Manufacturing Co. has been incorporated for the manufacture of cigars and smoking tobacco, with C. H. Vaughn, president; W. S. Hume, vice-president; C. H. Chenault, secretary-treasurer, and Fred A. Miller, manager; capital stock \$6000.

Uniontown—Coal Mines, Elevators, etc.—Bloomfield & Co. have purchased from W. P. D. Bush 4000 acres of coal land in and adjoining Uniontown for the Kentucky Coal, Coke & Mining Co., now in process of formation with a capital stock of \$250,000. The company will develop the property by opening mines and establishing large coal elevators at Paducah and Memphis.

Utica—Saw Mill.—The Norman Lumber Co. of Louisville, Ky., is erecting a \$7000 saw mill at Utica.

Williamstown—Turnpike.—Chartered: The Hedge-Dunn Turnpike Road Co., by R. D. Dunn and others, with a capital stock of \$1300.

Williamstown—Turnpike.—J. A. Anderson and others have incorporated the Ferrel-Elliston Station Turnpike Co., with a capital stock of \$4000.

LOUISIANA.

Buras—Canning Factory.—Capt. M. P. Doullut of New Orleans and J. B. Fasterling

are erecting a canning factory at Buras; building will be 80x120 feet and equipped with the latest improved machinery for a capacity of 1000 barrels of oysters per day; the parties have already established a cold-storage plant, and will in a short time erect an ice factory.

Clinton—Cotton Mill.—The Clinton Cotton & Yarn Factory will be organized for the erection of the cotton factory reported during the week. Among those interested are Isidor Mayer and Prof. George J. Ramsey.

Hammond—Planing Mill.—The Olmstead Novelty Works has been purchased by G. E. Dunn, who will operate it as a planing mill.

Lake Charles—Pumping Plant.—The North American Land & Timber Co., A. V. Eastman, manager, has awarded contract for the erection of an irrigating pumping plant to include two automatic engines of ninety horse-power each, two return tube boilers of 100 horse-power each and two pumps of 40,000 gallons capacity; rope transmission will connect the driving power with the pumps.

Monroe—Cotton Mill.—Efforts will be made for the organization of a company to erect a cotton mill. Address A. A. Gunby, who is interested.

Shreveport—Box Factory.—W. K. Henderson will establish a box factory.

Washington—Sugar Factory.—The Oakland plantation has been purchased from Jack Thompson by a Chicago syndicate for \$85,000 and a large sugar factory will be erected.

Winnsboro—Saw Mill.—J. V. Munn will rebuild his saw mill, recently reported burned.*

MARYLAND.

Baltimore—Distillery.—The Maryland Pure Rye Distilling Co. has been incorporated, with a capital stock of \$10,000, by J. Rosenbaum, R. G. Shipman, H. F. Spooner, all of New York city, and others.

Baltimore—Car-wheel Works.—The Maryland Car Wheel Works has been incorporated, with a capital stock of \$500,000, by N. T. Bonton, A. G. Wellington of Chicago, E. J. Tilkman, J. W. Stuart and H. R. Preston of Baltimore.

Baltimore—Chartered: The Inventors' Manufacturing Co., for the purpose of making apparatus for preventing accidents in elevators, etc., by August A. Roth, George C. Hiltz, Philip Hiltz and others; capital stock \$10,000.

Baltimore—Distillery.—The Bokel-Gwynn-McKenney Company, for the manufacture of whiskies, wines and liquors, has been incorporated, with J. Anton Bokel, president; Ralf C. Gwynn of Washington, vice-president; Mortimer W. McKenney of Glyndon, Md., secretary; Albert H. Wilson of Baltimore, treasurer; capital stock \$100,000. A warehouse has been secured at 119 South street.

Havre de Grace—Electric-light Plant.—John H. Record of Bel Air, Md., has purchased site and awarded contract for erection of the electric-light plant at Havre de Grace, reported during the week, to W. L. Black, 1403 Filbert street, Philadelphia, Pa.*

Nanticoke—Crate and Basket Factory.—Robert Alexander of Kansas City, Mo., will erect a crate and basket factory at Nanticoke.

Washington—Medicine Factory.—The M. A. Winter Co. has been incorporated, with a capital stock of \$250,000, for the manufacture of proprietary medicines, by M. A. Winter (president) and others.

MISSISSIPPI.

Addison—Saw Mill.—W. C. Veach has purchased 2000 acres of pine land and will erect a mill for its development with daily capacity of 30,000 feet.

Bolivar—Medicine Factory.—The Great Forest Remedy Co., incorporated last week, has had its factory established for several years. Power has not been used yet, but will probably be installed soon, with mixers, tablet machines, etc.; A. J. Hunter, manager.*

Clarksdale—Water and Sewer Systems.—The city will call at once for bids on the construction of the water works and sewer system mentioned last week as voted. General specifications and plans are now on file at the office of the city clerk, Al Nachman.*

Greenville—Sewerage System.—The city will hold an election to decide the issuance of \$65,000 of bonds for construction of sewerage system recently noted. Address J. M. See, city clerk.

Holden—Flour Mill.—The Conner Milling & Elevator Co. will rebuild its flour mill, recently reported burned.*

Sardis—Street Improvements.—The city will expend \$25,000 for street improvements. Address "The Mayor."

St. Louis—Land Company.—Chartered: The Marion County Land Co., with a capital stock of \$10,000, by Rolla W. Hess, Charles M. Yager and Arthur N. Sager.

Tupelo—Electric-light Plant.—The city will erect an electric-light plant. Address V. C. Kincannon, Com.*

MISSOURI.

Braymer—Creamery.—The Braymer Creamery Co. has been incorporated by S. F. Farar, C. L. Mowder, P. S. Proctor and others; capital stock \$2000.

Carthage—Lead and Zinc Sludge Mill.—J. F. Barker will erect a sludge mill at Stotts City.

Joplin—Lead and Zinc Mines.—The Audrey Lead & Zinc Co. has been incorporated, with a capital stock of \$50,000, by J. E. Devine, J. R. Glover, Jr., C. D. Pillsbury and others.

Joplin—Lead and Zinc Mines.—Chartered: The Scranton-Joplin Zinc Co., by J. W. Walker, John Proud, G. E. Hall and others; capital stock \$65,000.

Joplin—Mining.—Chartered: The McConnell Mining Co., with a capital stock of \$6400, by A. B. and R. C. McConnell and L. L. Travis.

Kansas City—Elevator.—The Memphis Elevator Co., reported last week as incorporated, will operate the Memphis elevator built by the Fort Scott & Memphis Railroad Co. and leased to Brodnax & McLiney.

Kansas City—Investment Company.—Chartered: The Wishart Investment Co., with a capital stock of \$20,000, by D. Wishart, E. A. Wishart, E. D. Maddox and others.

Odessa—Electric-light Plant.—The city will erect electric-light plant, as lately reported; capacity thirty-five arc and 1200 incandescent lights; E. F. Blake, mayor.*

Prosperity—Lead and Zinc Mines.—The Laura S. zinc mine and forty-five acres of mineral land near Prosperity has been sold to George C. Campbell of St. Louis, Mo., for \$70,000, who has, with James E. Clark, A. N. Milner and others, incorporated the Laura S. Zinc Mining Co., with a capital stock of \$300,000, to develop the property.

Sedalia—Telephone System.—J. W. Lobb is endeavoring to organize the Citizens' Mutual Telephone Co. for the establishment of a system.

Smithton—Lead Mines.—Dr. Kernode of Sedalia is developing lead mines near Smithton.

St. Joseph—Brewing Company.—Chartered: The Home Brewing Co., with a capital stock of \$24,000, by P. Y. Brinton, J. J. Angleton and others.

St. Louis—Construction Company.—Chartered: The Hall Grading & Construction Co., by Henry Hall and others, with a capital stock of \$11,000.

St. Louis—Real Estate, etc.—Chartered: The Wurmb Real Estate & Investment Co., by Albert J. Wurmb and others; capital stock \$25,000.

St. Louis—Coal Mining, etc.—The National Coal & Ice Co. has been incorporated for the purpose of conducting a general coal-mining business, etc.; capital stock \$50,000; incorporators, Joseph S. Turley, Jacob F. Clepper, John J. Holt, L. D. Holt and others.

St. Louis—Stove and Hardware Company.—Harry and L. F. Shember and others have incorporated the A. F. Geschwinder Stove & Hardware Co., with a capital stock of \$2000.

St. Louis—Coffee Company.—Chartered: The Aroma Coffee & Spice Co., with a capital stock of from \$50,000 to \$75,000.

St. Louis—Hat Factory.—The Olive Hat Manufacturing Co. has increased its capital stock from \$5000 to \$15,000.

Zalma—Flour Mill.—O. B. Turly is erecting a new flour mill.

NORTH CAROLINA.

Ashboro—Flour Mill.—Mr. Pearce will erect a new flour mill.*

Charlotte—Clothing Factory.—The Charlotte Clothing Co. is adding fifteen new machines.

Chatham County—Water-power Development, Cotton Mill, etc.—The Erwin Cotton Mills Co. of Durham, N. C., has purchased more lands on the Catawba river to advance their water-power developments, and will erect cotton mill to cost \$250,000, electric-light plant to supply surrounding towns and factories, and later on may supply water to Hickory, N. C. This company was recently reported as having purchased 1000 acres of

land in Chatham county, and to develop the water-power available, utilizing it in the operation of two cotton mills; B. N. Duke of Durham, president.

Coleridge—Cotton Mill.—The Enterprise Manufacturing Co. is erecting an addition 30x90 feet to its cotton mill.

Concord—Knitting Mill.—It is reported that Charles Wagner will erect a knitting mill.

Concord—Lumber Mills.—The Yorke & Wadsworth Lumber Co. has been incorporated, with a capital stock of \$50,000, by J. C. Wadsworth, N. F. Yorke, C. J. Harris and others. This company absorbs the Concord Lumber Co. and Yorke, Wadsworth & Co.; plants already in operation.

Danbury—Water-power Development.—It is reported that the water-power at Danbury owned by George Heck of Knoxville, Tenn., has been purchased by a company for development.

Durham—Cotton Mill.—A company has been organized for the erection of a \$400,000 cotton mill, with T. B. Fuller, president; George W. Watts, vice-president; J. S. Carr, Rufus L. Patterson and others, directors.

Gastonia—Cotton Mill.—John F. Love and George A. Gray, reported recently as projecting a 25,000 to 50,000-spindle and 1200 to 2500-loom mill, have purchased site for the contemplated enterprise. Arrangements will be made to invest about \$1,000,000.

Gold Hill—Concentrating Plant, etc.—The Union Copper Mining Co. (Walter G. Newman, president, 80 Broadway, New York) will soon have completed one of its five concentrating plants, which will have a capacity of 180 tons of copper ore per day. There is also a large smelter under construction.

Goldsboro—Buggy Factory.—The Goldsboro Buggy Factory has been organized, with Robert Kornegay, president, and A. U. Kornegay, secretary, and established a buggy factory.

Hickory—Cotton Mill.—E. L. Shuford is negotiating for the purchase of the Rowe shools, near Hickory. If the purchase is completed a company will be organized to erect a cotton factory and develop the water-power.

Hot Springs—Barytes Plant.—The Hot Springs Barytes Co., W. H. Dingee, Lynchburg, Va., treasurer, will rebuild its plant recently reported burned.*

Kinston—Furniture Factory.—A stock company with capital of \$30,000 has been organized for the establishment of a furniture factory. Address J. B. Temple.*

Leaksville—Flour Mill.—J. C. and E. B. King have awarded contract for a five-stand rotary roller system flour mill.

Mocksville—Furniture Factory.—The Mocksville Manufacturing Furniture Co. has been organized, with a capital stock of \$10,000, for the establishment of a furniture factory. Address L. G. Horn.*

Monroe—Ice Factory, etc.—The Monroe Oil & Fertilizer Co. (recently reported to establish a ginnery) is increasing its capital stock to \$30,000, and has decided to install an ice plant also.

Oxford—Cotton Mill.—A movement is on foot for the formation of a \$200,000 cotton-factory company. A large part of the capital stock has been subscribed. S. W. Minor, A. A. Hicks and others are interested.

Pineola (not a postoffice)—Lumber Mill.—The Ritter Lumber Co., previously reported as incorporated, will erect a double band-saw mill at Pineola; also a saw mill at Devon with a capacity of 100,000 feet per day.

Raleigh—Knitting Mill.—The Chamber of Commerce will undertake the establishment of a knitting mill. Address W. N. Jones, president.

Seagrove—Lumber Company.—The Redding Lumber Co. has been incorporated, with a capital stock of \$5000, by J. H. Redding, Fletcher King of Ashpole, T. J. Ellis of Seagrove and others.

Statesville—Flour Mill.—James H. Sharpe is installing a 40-barrel flour mill; contract let.

Wilmington—Boat Factory.—Manuel Garcia has awarded contract to T. F. Tyler for the erection of a boat factory 30x800 feet, to be equipped with the latest improved woodworking machinery suitable for boat-building and cabinet work.

Wilmington—Blacksmith Shops, etc.—John G. Marshall and E. M. Jones have purchased the blacksmith shops of Thomas F. Bell, and will enlarge and operate, conducting a general wheelwright, plumbing, blacksmith, etc., business.

Winston-Salem.—David Brown has discovered gold quartz on his property near Winston, and will probably develop.

SOUTH CAROLINA.

Aiken—Light and Power Plant.—John Gary Evans, representing a new company, has purchased the plant of the Aiken Light & Power Co., and will greatly improve it and add other industries.

Bennettsville—Pea-huller and Separator Factory.—The Star Pea Machine Co., John M. Brasington, manager, will establish a factory in 1900 for the manufacture of pea-hullers and separators; location of plant not yet decided upon.

Charleston—Electric-light Plant.—The city will investigate the advisability of constructing an electric-light plant with capacity of 300 arc lights. Address "The Mayor."

Clark—Canning Factory.—Wm. S. Middleton contemplates establishing a fruit and vegetable cannery.*

Clifton—Cotton Mill.—The Clifton Manufacturing Co. will erect an addition to mill No. 3 and install 15,000 more spindles, making its total 11,792 spindles; contract for foundation for new building let to Alex. Gibson and J. C. Cooksey.

Columbia—Gold Mines.—James Y. Culbreath has discovered gold deposits on his property in Saluda county, and will install machinery for extensive developments.

Columbia—Electric-light Plant.—The city contemplates installing an electric-light plant of from 200 to 300 arc lights capacity. W. H. Gibbes, chairman of committee on lights, may be addressed.*

Denmark—Rice Mill.—The Denmark Milling & Ginning Co. proposes to install a rice mill, and contemplates installing a 25-ton cottonseed-oil mill.*

Greenville—Cotton Mill.—It is reported that the American Spinning Co. will erect a cloth mill, to be known as mill No. 2 and to have 10,000 spindles and 500 looms; building to be of brick, four stories, 120x250 feet, and employ 300 operatives. It is proposed to increase the capital stock from \$125,000 to \$350,000; J. H. Morgan, president.

Hickory—Cotton Mill.—The company reported last week as to be organized with a capital stock of \$50,000 for erection of a cotton mill will be known as the Marie Mills of Hickory Grove. R. M. Carroll of Blairsville, S. C., or Col. J. R. Ashe of Yorkville, S. C., may be addressed.

Lancaster—Cotton Mill.—The Lancaster Cotton Mills will at an early date increase its capital stock from \$150,000 to \$1,000,000 and add 40,000 to 50,000 spindles; orders for most of the machinery have been placed; present spindles, 10,500; Leroy Springs, president.

Laurens—Laundry.—Thos. K. Hudgens of Easley, S. C., and associates will form a \$3000 company for the establishment of a steam laundry at Laurens.*

Rock Hill—Cotton Mill.—The Crescent Cotton Mills, lately reported to issue \$50,000 of bonds, will add 8500 spindles and twenty revolving flat cards; also contemplates building a new 150-foot round smokestack and installing two new boilers.

Spartanburg—Laundry.—J. O. Ervin is enlarging his laundry by the erection of an addition to building and the installation of new machinery.

Westminster—Cotton Mill.—The Cheswell Cotton Mill Co. has been incorporated by William E. Cheswell and Campbell Courtney of Newry, W. P. Anderson and W. J. Carter of Westminster and C. E. Mason of Toccoa, Ga.; capital stock \$100,000.

TENNESSEE.

Bristol—Woodworking Factory.—J. A. Stone & Bro. will establish a factory, manufacturing building materials.

Bristol—Saw Mill.—The Empire Lumber & Mining Co. has ordered machinery for a large lumber plant at Shady Valley, to have a daily capacity of 75,000 feet.

Bristol—Zinc Mines.—J. S. Baxter and others have formed the Nancy Zinc Co. for prospecting various zinc properties to ascertain if the mineral is rich enough to warrant the placing of machinery and the building of furnaces; improvements will follow later.

Chattanooga—Candy Factory.—Trigg Dobbs & Co. have secured larger building and installed new boiler and engine of sixty horse-power, a complete electric-light plant and a repumping outfit.

Chattanooga—Sewer Extension.—The city has awarded contract to J. B. Neely at \$8633 for extension of the Washington-street sewer.

Chattanooga—Shoe Factory.—Benjamin Scribner of Lynn, Mass., with Chattanooga and Atlanta capitalists, has organized a \$100,000 company for the establishment of a shoe factory at Sherman Heights; building has been secured and \$10,000 worth of machinery purchased.

Clarksville—Saw Mill.—Tandy Smith has purchased the Clarksville Bending Works and will convert it into a saw mill.

Clinton—Zinc Works.—The John Weir Zinc Co., Mossy Creek, Tenn., will erect large zinc works at Clinton.

Dickson—Latch Factory.—The National Latch Co. has been organized to manufacture the Davidson everlasting gate latch.

Fayetteville—Manufacture, etc.—Business men have optioned land and water rights on the Elk river, near Fayetteville, with a view of development and the erection of factories, probably a cotton mill first of all. It is estimated that for \$35,000 developments can be made to furnish 750 horse-power at low water.

Jackson—Publishing.—The Sun Publishing Co. has been incorporated to conduct general printing and publishing business, with a capital stock of \$7000, by J. O. Ozment, J. E. Pope, J. W. Buford and others.

Lone Mountain—Saw Mill.—The Osborne Lumber Co. of Middlesborough, Ky., has purchased 500,000 feet of lumber in Clayborne county, and will erect a saw mill at Lone Mountain for cutting it.

Manchester—Saw and Planing Mill.—Maxim Smith will rebuild his saw and planing mill reported burned.

Memphis—Coal Mines, Elevators, etc.—See item under Uniontown, Ky.

Mt. Pleasant—Electric-light Plant.—H. D. Ruhm has made a proposition to the city for establishing an electric plant for lighting and heating purposes, and to furnish power for operation of machinery.

Mt. Pleasant—Water Works.—The Mt. Pleasant Real Estate Co. (composed of H. D. Ruhm, E. L. Gregory and John Ruhm, Jr.) has applied for franchise for construction of a system of water works.

Nave Hill—Flour Mill.—J. P. Lay has installed a new 25-horse-power engine and boiler, and will install additional machinery to increase the capacity of his flour mill.

Squatchie County—Coal Mining.—The Douglass Coal & Coke Co. has purchased 14,000 acres of coal lands in Squatchie county for \$50,000 and will develop extensively, expending about \$100,000.

Waverly—Telephone Line.—The Cumberland Telephone & Telegraph Co., H. H. Fowler, district manager, will extend a branch line from Waverly to Linden.

TEXAS.

Beaumont—Woodworking Factory.—The Texas Arm & Pin Co., F. W. Greer, manager, is installing machinery for the manufacture of arms and pins, to be operated in connection with its planing mill.

Bunns Bluff—Saw Mill.—The J. F. Keith Co. of Beaumont has purchased pine lands in Orange county near Bunns Bluff and will erect a saw mill.

Denison—Chartered: The Denison Driving Park and Fair Association, with a capital stock of \$5000, to encourage agriculture and horticulture, by P. H. Tobin and others.

El Paso—Sewers and Courthouse.—The city council has passed two ordinances providing for the issuance of \$20,000 of bonds for improvement of the sewerage system and for the issuance of \$19,000 of bonds for completion of new city courthouse, now in course of erection. An election will be held October 24. Address "The Mayor."

Greenville—Water Works.—A stock company will be organized, with a capital stock of \$50,000, and W. L. Beckman, president; J. F. Phillips, vice-president; W. A. Williams, secretary-treasurer, for the construction of a system of water works.

Honey Grove—Electric-light Plant.—E. E. Blocker and T. U. Cole have leased and will operate the Honey Grove electric-light plant.

Houston—Oil Refinery.—John Davidson is establishing a refinery with a capacity of 500 barrels per day.

Houston—Saw Mills and Timber Lands.—John H. Kirby has secured control of extensive tracts of long-leaf yellow-pine timber lands in Eastern Texas, contributory to the Gulf, Beaumont & Kansas City Railway, now building. The main object in buying these lands is to enable the railroad to do business immediately upon its completion. In the event that satisfactory stumpage arrangements are not completed with manufacturers, Mr. Kirby will erect six or eight mills.

Independence—Telephone System.—W. F. Wyatt has organized a company for construction of telephone line from Independence to William Penn, and from last-named city to Whitman.

Lima—Lumber Company.—The Lima Lumber Co. has been incorporated, with a capi-

tal stock of \$20,000, by M. Thackaberry, C. G. Thackaberry and George W. Steiff.

McKinney—Packery.—William Allen is establishing a packery.

Navasota—Telephone and Construction Company.—The Navasota Telephone & Construction Co. has been incorporated, with a capital stock of \$10,000, by T. C. Foster, Ward Templeman and A. H. Ketchum.

Orange—Saw Mill.—W. D. Street has established a floating saw mill.

Sartartia—Sugar Mill.—L. A. Ellis is installing an entire new plant of sugar-refining machinery, including separators, extractors, etc.

Sherman—Ice Factory and Cold-storage Plant.—B. L. Fielder is organizing a company for the erection of an ice factory and cold-storage plant, as reported last week; capacity twenty tons.

Taylor—Flour Mill.—Efforts are being made for the organization of a stock company to erect a flour mill. Address J. A. Thompson, president Board of Trade.

Texarkana—Lumber Company.—The Imperial Lumber Co. has been incorporated, with a capital stock of \$10,000, by W. C. Paxton, G. Munze and Harry Munzesheimer.

VIRGINIA.

Alexandria—Cigar Factory.—The Rex Cigar & Vending Co. has been incorporated for the manufacture of cigars, with a capital stock of \$100,000, by Addison G. Du Bois, president; Willard S. Dormus, vice-president, and Harry L. Bryan, secretary-treasurer.

Alexandria—Chartered: The Miller Home Treatment Co. has been incorporated to manufacture instruments for the cure of diseases and to sell medicines; capital stock between \$1000 and \$24,000; A. C. Miller, president; W. A. L. Riggel, vice-president; D. D. Coon, secretary-treasurer.

Barton Heights—Electric Lights and Water Works.—A. H. Meyer, B. S. Ragland and A. W. Martinstein have been appointed a committee to prepare plans and specifications for the erection of the proposed electric-light plant and water works. Address "The Mayor."

Berryville—Flour Mill and Grain Elevator. The Berryville Milling Co. has been incorporated, with C. S. Weston, president; A. W. Dickson, secretary; George Wm. Cone, treasurer, and William E. Reed, manager; has purchased the flour mills formerly operated by the T. Lovett Company and is installing new machinery to increase the capacity to seventy-five barrels per day; capital stock \$12,000.

Berryville—Water Works.—Contract for the construction of the proposed water-works system at Berryville has been awarded to the W. Rileigh Weaver Construction Co. of Baltimore, Md.

Big Stone Gap—Iron Furnace.—The Union Steel & Chain Co., Empire Building, New York, N. Y., is having the iron furnace at Big Stone Gap repaired and altered preparatory to going into blast.

Charlottesville—Flour Mill.—The Virginia Ice Company will add a flour mill with capacity of from fifty to 100 barrels per day to its plant.*

Christiansburg—Electric-power Plant.—The city will hold an election to decide the establishment of a plant to be operated by water-power in generating electricity for lighting purposes. Address "The Mayor."

Eggleston—Woodworking Factory.—The New River Stave Co., reported during the week (under Roanoke) as incorporated, will erect a factory at Eggleston for the manufacture of barrel staves, spokes, handles, etc., with a daily capacity of 20,000 staves, and to cost \$5000; J. T. Strickland, Roanoke, president.

Elk Garden—Road Improvement.—The Sturt Land & Cattle Co. has been organized to construct fifteen miles of macadam road from Elk Garden to Saltville.

Fredericksburg—Beet-sugar Factory.—Mr. Spencer is investigating with a view of establishing a beet-sugar factory. Address, care of State board of agriculture, Richmond, Va.

Fredericksburg—Sewerage System.—Dr. Henry Froehling of Richmond, representing a syndicate of capitalists, has applied to the city for franchise to sewer and improve the streets.

Manchester—Woodworking Plant.—The Richmond Woodworking Co. will double the capacity of its plant by erection of additional building, etc.

Newport News—The Newport News Manufacturing Co. will erect a factory for the manufacture of the Bargamin automatic gas cut-off; address care of M. E. Braxton.

Norfolk—Lunch Company.—The Virginia Lunch Co. has been incorporated, with a capital stock of \$4000, by Charles L. McDonald, president, and others.

Radford—Mining, etc.—The Radford Southern Railroad & Mining Co. has been incorporated, with George W. Miles, president; W. R. Wharton, secretary, and M. M. Caldwell, treasurer.

Richmond—Lumber Company.—The Pee Dee Lumber Co. has been incorporated, with capital stock from \$10,000 to \$50,000; B. H. Ellington, president; F. Harwood, vice-president; B. Pollard Cardoza, secretary-treasurer.

Richmond—Printing.—The Walthall Printing & Southern Tobacconist Co. has been incorporated to conduct a general printing business; capital stock \$5000 to \$20,000; officers, A. J. Parish, president; W. E. Dibrell, vice-president and secretary, and W. B. Walthall, treasurer and manager.

Richmond—Abattoir.—A company has been organized, with James B. Pace, president, for the purpose of establishing an abattoir and meat-packing plant with capacity of 350 hogs and fifty beeves per day.

Roanoke—Furnace.—C. R. Baird & Co., Philadelphia, Pa., have purchased the West End furnace at Roanoke, as recently reported, and will repair and operate it.

Wise County, etc.—A dispatch states that the Virginia Iron, Coal & Coke Co. (main office Bristol, Tenn., New York office Empire Building) has awarded contract for the construction of 300 coke ovens at Toms Creek coal mines in Wise county; for 500 ovens at Coeburn, Va., and 300 ovens at Looney Creek, near Big Stone Gap. The company will also erect at Toms Creek mines a large ore-washer and an electric-light plant.

Woodstock—Water Works.—P. S. Roler, city engineer, has completed surveys for the works lately noted.

Wytheville—Broom Factory.—The Wytheville Broom Factory will install additional machinery.

WEST VIRGINIA.

Belington—Mercantile.—Frank P. Rease and others have incorporated the Randolph & Barlow Supply Co., with an authorized capital of \$100,000.

Benwood—Pumping Plant and Iron Furnace.—The Riverside Iron Works is constructing its pumping plant at a cost of \$75,000; is also receiving materials for its proposed new iron furnace.

Charleston—Toilet Company.—The X-Ray Toilet Manufacturing Co. has been incorporated to conduct general toilet business by J. H. High, W. Snooks, W. A. Forsythe and others; capital stock \$100,000.

Charleston—Milling Company.—The Carolina Milling Co. has been incorporated to conduct a general mining, milling, etc., business, by J. C. Jordan, G. E. Price, J. R. Kauffman and others; capital stock \$250,000.

Flemington—Coke Plant, Electric Plant, etc.—The Flemington Coal & Coke Co., S. L. Simpson, president, contemplates building a \$300,000 coke plant. It is installing at present a \$75,000 electric plant for cutting and getting out coal, with capacity of 4000 tons per day. The company is capitalized at \$2,500,000.

Charleston—Milling Company.—The Carolina Milling Co. has been incorporated to conduct a general mining, milling, etc., business, by J. C. Jordan, G. E. Price, J. R. Kauffman and others; capital stock \$250,000.

St. Mary's—Water Works.—Surveys, plans and specifications are being made for construction of water-works system. Address John F. Barron, mayor.*

Wheeling—Coal Mines.—The Wheeling Consolidated Coal Co. has been incorporated, with an authorized capital of \$5,000,000, to develop extensively coal lands in the vicinity of Wheeling, by John M. Birch, William H. Hearne and Jerre A. Miller.

Wheeling—Tobacco Company.—Chartered: The Pneumatic Tobacco Stemmer Co., to conduct general tobacco business, by L. D. Lorentz, J. H. Whittaker, G. A. Prevost and others; capital stock \$1,000,000.

Wheeling—Timber Lands.—The Virginia Timber & Lumber Co. has been incorporated, with a capital stock of \$200,000, and has secured control of a large tract of timber land for development; incorporators, J. J. Holloway, W. A. Wilson, E. M. Holliday, all of Moundsville, and others.

BURNED.

Benning, D. C.—The Benning Hotel property, owned by the Union Stock Yards Co.; estimated loss \$9000.

Bonham, Texas.—Clutter's cotton gin.

Caldwell, Texas.—Lowry Round Bale Gin Co.'s plant; estimated loss \$6000.

Charleston, S. C.—The St. Charles Hotel, F. O. London, manager.

Charleston, W. Va.—The dry-kiln at Morgan & Gardner's planing mill.

Dobbin, W. Va.—Saw mill at Dobbin of Whitmer, Lane & Co. of Philadelphia, Pa.; estimated loss \$20,000.

Dublin, Va.—G. S. Sexton's saw mill.

Eastville, Va.—N. L. Holland's saw mill; estimated loss \$4000.

Frederick, Md.—The cooper shop at the Frederick Flouring Mills.

Leo, Texas.—Joe Murphy's gin and corn mill; estimated loss \$3000.

Manchester, Tenn.—Maxim Smith's saw and planing mill; loss about \$1200.

McKinney, Texas.—A. I. Burger's cotton gin; estimated loss \$10,000.

Memphis, Tenn.—Lee Brothers Gin Co.'s plant; estimated loss \$110,000.

Mineral City, Va.—The entire plant of the Pyrites Mining & Chemical Co.

New Waverly, Texas.—M. Scorpinski's cotton gin; loss about \$1250.

Oakwoods, Texas.—D. B. Scarborough's gin.

Paris, Texas.—F. W. Wagner's saw mill; estimated loss \$2000.

Petersburg, Va.—Upson Company's plant; estimated loss \$28,000.

Troy, Texas.—M. C. Elliott's gin; estimated loss \$1000.

Waco, Texas.—Dennis Manufacturing Co.'s mattress factory burned to the extent of \$8000.

Zion Hill, Miss.—M. H. Wilkinson's cotton gin.

BUILDING NOTES.

Atlanta, Ga.—Apartment-house.—Nat Kaiser will erect a five-story apartment-house, equipped with all modern conveniences, to cost \$25,000.

Attalla, Ala.—Depot.—The Nashville, Chattanooga & St. Louis Railroad Co. will erect freight depot; J. W. Thomas, Jr., general manager, Nashville, Tenn.

Augusta, Ga.—Depot.—The Southern Railway Co. will erect a new depot 50x600 feet; Frank S. Gannon, general manager, Washington, D. C.

Baltimore, Md.—Hotel.—Wyatt & Nolting have prepared the plans and E. M. Noel has received contract for the proposed hotel recently reported to be erected near Walbrook by Daniel W. Dwyer; building will be four stories, of stone and shingles, 200x220 feet; elevators, modern plumbing, electric and gas lighting and steam heat will be among the conveniences; six or ten cottages will also be erected; entire cost \$100,000.

Birmingham, Ala.—Hotel.—J. Fox's Sons have purchased site adjoining their present building for \$10,500 and contemplate the erection of a modern hotel.

Bristol, Tenn.—Office Building, etc.—The Virginia Iron, Coal & Coke Co. will erect office building and probably freight and passenger depot.

Cartersville, Ga.—Courthouse.—Bartow county will hold an election on November 15 to decide the issuance of \$30,000 for the erection of new courthouse. Address "County Clerk."

Charleston, W. Va.—Capitol Annex.—Caldwell & Drake of Parkersburg, W. Va., have received contract at \$57,695 for building the capitol annex.

Charlotte, N. C.—Warehouse.—Zeke Johnson will erect a three-story warehouse 100x40 feet.

Charlotte, N. C.—Warehouse.—The Merchants, Manufacturers & Farmers' Bonded Warehouse Co. will erect another warehouse with capacity for 40,000 bales of cotton.

Chattanooga, Tenn.—Business Building.—Frank McCormack of Dayton, Ohio, will erect a brick business block at Chattanooga.

Chattanooga, Tenn.—Dwelling.—Adams & Bearden have contract for erection of Dr. R. T. Isbester's residence, to be of buff brick, with white stone trimmings and pilasters.

Chattanooga, Tenn.—Armory.—Levi & Griffith, 41½ Lookout street, have received contract for erection of armory, as recently reported; building will be of brick, 60x145 feet, roof to be supported by five steel trusses covered with curved corrugated iron.

Corpus Christi, Texas—Pavilion.—The city will erect a \$7500 pavilion. Address "The Mayor."

Dickson, Tenn.—Jail.—Contract has been awarded for erection of the \$5500 jail, as reported last week; to be fireproof. Address C. M. Lovell, mayor.

El Paso, Texas.—Hotel.—Walter E. Parfitt of New York, N. Y., will prepare plans for

are erecting a canning factory at Buras; building will be 80x120 feet and equipped with the latest improved machinery for a capacity of 1000 barrels of oysters per day; the parties have already established a cold-storage plant, and will in a short time erect an ice factory.

Clinton—Cotton Mill.—The Clinton Cotton & Yarn Factory will be organized for the erection of the cotton factory reported during the week. Among those interested are Isidor Mayer and Prof. George J. Ramsey.

Hammond—Planing Mill.—The Olmstead Novelty Works has been purchased by G. E. Dunn, who will operate it as a planing mill.

Lake Charles—Pumping Plant.—The North American Land & Timber Co., A. V. Eastman, manager, has awarded contract for the erection of an irrigating pumping plant to include two automatic engines of ninety horse-power each, two return tube boilers of 100 horse-power each and two pumps of 40,000 gallons capacity; rope transmission will connect the driving power with the pumps.

Monroe—Cotton Mill.—Efforts will be made for the organization of a company to erect a cotton mill. Address A. A. Gunby, who is interested.

Shreveport—Box Factory.—W. K. Henderson will establish a box factory.

Washington—Sugar Factory.—The Oak-land plantation has been purchased from Jack Thompson by a Chicago syndicate for \$85,000 and a large sugar factory will be erected.

Winnsboro—Saw Mill.—J. V. Munn will rebuild his saw mill, recently reported burned.*

MARYLAND.

Baltimore—Distillery.—The Maryland Pure Rye Distilling Co. has been incorporated, with a capital stock of \$10,000, by J. Rosenbaum, R. G. Shipman, H. F. Spooner, all of New York city, and others.

Baltimore—Car-wheel Works.—The Maryland Car Wheel Works has been incorporated, with a capital stock of \$500,000, by N. T. Bonton, A. G. Wellington of Chicago, E. J. Tilman, J. W. Stuart and H. R. Preston of Baltimore.

Baltimore.—Chartered: The Inventors' Manufacturing Co., for the purpose of making apparatus for preventing accidents in elevators, etc., by August A. Roth, George C. Hiltz, Philip Hiltz and others; capital stock \$10,000.

Baltimore—Distillery.—The Bokel-Gwynn-McKenney Company, for the manufacture of whiskies, wines and liquors, has been incorporated, with J. Anton Bokel, president; Ralf C. Gwynn of Washington, vice-president; Mortimer W. McKenney of Glyndon, Md., secretary; Albert H. Wilson of Baltimore, treasurer; capital stock \$100,000. A warehouse has been secured at 119 South street.

Havre de Grace—Electric-light Plant.—John H. Record of Bel Air, Md., has purchased site and awarded contract for erection of the electric-light plant at Havre de Grace, reported during the week, to W. L. Plack, 1403 Filbert street, Philadelphia, Pa.*

Nanticoke—Crate and Basket Factory.—Robert Alexander of Kansas City, Mo., will erect a crate and basket factory at Nanticoke.

Washington—Medicine Factory.—The M. A. Winter Co. has been incorporated, with a capital stock of \$250,000, for the manufacture of proprietary medicines, by M. A. Winter (president) and others.

MISSISSIPPI.

Addison—Saw Mill.—W. C. Veach has purchased 2000 acres of pine land and will erect a mill for its development with daily capacity of 30,000 feet.

Bolivar—Medicine Factory.—The Great Forest Remedy Co., incorporated last week, has had its factory established for several years. Power has not been used yet, but will probably be installed soon, with mixers, tablet machines, etc.; A. J. Hunter, manager.*

Clarksdale—Water and Sewer Systems.—The city will call at once for bids on the construction of the water works and sewer system mentioned last week as voted. General specifications and plans are now on file at the office of the city clerk, Al Nachman.*

Greenville—Sewerage System.—The city will hold an election to decide the issuance of \$65,000 of bonds for construction of sewerage system recently noted. Address J. M. See, city clerk.

Holden—Flour Mill.—The Conner Milling & Elevator Co. will rebuild its flour mill, recently reported burned.*

Sardis—Street Improvements.—The city will expend \$25,000 for street improvements. Address "The Mayor."

St. Louis—Land Company.—Chartered: The Marion County Land Co., with a capital stock of \$10,000, by Rolla W. Hess, Charles M. Yager and Arthur N. Sager.

Tupelo—Electric-light Plant.—The city will erect an electric-light plant. Address V. C. Kincannon, Com.*

MISSOURI.

Braymer—Creamery.—The Braymer Creamery Co. has been incorporated by S. F. Farar, C. L. Mowder, P. S. Proctor and others; capital stock \$2000.

Carthage—Lead and Zinc Sludge Mill.—J. F. Barker will erect a sludge mill at Stotts City.

Joplin—Lead and Zinc Mines.—The Audrey Lead & Zinc Co. has been incorporated, with a capital stock of \$50,000, by J. E. Devine, J. R. Glover, Jr., C. D. Pillsbury and others.

Joplin—Lead and Zinc Mines.—Chartered: The Scranton-Joplin Zinc Co., by J. W. Walker, John Proud, G. E. Hall and others; capital stock \$65,000.

Joplin—Mining.—Chartered: The McConnell Mining Co., with a capital stock of \$6400, by A. B. and R. C. McConnell and L. L. Travis.

Kansas City—Elevator.—The Memphis Elevator Co., reported last week as incorporated, will operate the Memphis elevator built by the Fort Scott & Memphis Railroad Co. and leased to Brodnax & McLiney.

Kansas City—Investment Company.—Chartered: The Wishart Investment Co., with a capital stock of \$20,000, by D. Wishart, E. A. Wishart, E. D. Maddox and others.

Odessa—Electric-light Plant.—The city will erect electric-light plant, as lately reported; capacity thirty-five arc and 1200 incandescent lights; E. F. Blake, mayor.*

Prosperity—Lead and Zinc Mines.—The Laura S. zinc mine and forty-five acres of mineral land near Prosperity has been sold to George C. Campbell of St. Louis, Mo., for \$70,000, who has, with James E. Clark, A. N. Milner and others, incorporated the Laura S. Zinc Mining Co., with a capital stock of \$300,000, to develop the property.

Sedalia—Telephone System.—J. W. Lobb is endeavoring to organize the Citizens' Mutual Telephone Co. for the establishment of a system.

Smithton—Lead Mines.—Dr. Kernode of Sedalia is developing lead mines near Smithton.

St. Joseph—Brewing Company.—Chartered: The Home Brewing Co., with a capital stock of \$24,000, by P. Y. Brinton, J. J. Angleton and others.

St. Louis—Construction Company.—Chartered: The Hall Grading & Construction Co., by Henry Hall and others, with a capital stock of \$11,000.

St. Louis—Real Estate, etc.—Chartered: The Wurm Real Estate & Investment Co., by Albert J. Wurm and others; capital stock \$25,000.

St. Louis—Coal Mining, etc.—The National Coal & Ice Co. has been incorporated for the purpose of conducting a general coal-mining business, etc.; capital stock \$50,000; incorporators, Joseph S. Turley, Jacob F. Clepper, John J. Holt, L. D. Holt and others.

St. Louis—Stove and Hardware Company.—Harry and L. F. Shember and others have incorporated the A. F. Geschwinder Stove & Hardware Co., with a capital stock of \$2000.

St. Louis—Coffee Company.—Chartered: The Aroma Coffee & Spice Co., with a capital stock of from \$50,000 to \$75,000.

St. Louis—Hat Factory.—The Olive Hat Manufacturing Co. has increased its capital stock from \$5000 to \$15,000.

Zalma—Flour Mill.—O. B. Turly is erecting a new flour mill.

NORTH CAROLINA.

Ashboro—Flour Mill.—Mr. Pearce will erect a new flour mill.*

Charlotte—Clothing Factory.—The Charlotte Clothing Co. is adding fifteen new machines.

Chatham County—Water-power Development, Cotton Mill, etc.—The Erwin Cotton Mills Co. of Durham, N. C., has purchased more lands on the Catawba river to advance their water-power developments, and will erect cotton mill to cost \$250,000, electric-light plant to supply surrounding towns and factories, and later on may supply water to Hickory, N. C. This company was recently reported as having purchased 1000 acres of

land in Chatham county, and to develop the water-power available, utilizing it in the operation of two cotton mills; B. N. Duke of Durham, president.

Cleridore—Cotton Mill.—The Enterprise Manufacturing Co. is erecting an addition 30x90 feet to its cotton mill.

Concord—Knitting Mill.—It is reported that Charles Wagner will erect a knitting mill.

Concord—Lumber Mills.—The Yorke & Wadsworth Lumber Co. has been incorporated, with a capital stock of \$50,000, by J. C. Wadsworth, N. F. Yorke, C. J. Harris and others. This company absorbs the Concord Lumber Co. and Yorke, Wadsworth & Co.; plants already in operation.

Danbury—Water-power Development.—It is reported that the water-power at Danbury owned by George Heck of Knoxville, Tenn., has been purchased by a company for development.

Durham—Cotton Mill.—A company has been organized for the erection of a \$400,000 cotton mill, with T. B. Fuller, president; George W. Watts, vice-president; J. S. Carr, Rufus L. Patterson and others, directors.

Gastonia—Cotton Mill.—John F. Love and George A. Gray, reported recently as projecting a 25,000 to 50,000-spindle and 1200 to 2500-loom mill, have purchased site for the contemplated enterprise. Arrangements will be made to invest about \$1,000,000.

Gold Hill—Concentrating Plant, etc.—The Union Copper Mining Co. (Walter G. Newman, president, 80 Broadway, New York) will soon have completed one of its five concentrating plants, which will have a capacity of 180 tons of copper ore per day. There is also a large smelter under construction.

Goldsboro—Buggy Factory.—The Goldsboro Buggy Factory has been organized, with Robert Kornegay, president, and A. U. Kornegay, secretary, and established a buggy factory.

Hickory—Cotton Mill.—E. L. Shuford is negotiating for the purchase of the Rowe shoals, near Hickory. If the purchase is completed a company will be organized to erect a cotton factory and develop the water-power.

Hot Springs—Barytes Plant.—The Hot Springs Barytes Co., W. H. Dingee, Lynchburg, Va., treasurer, will rebuild its plant recently reported burned.*

Kinston—Furniture Factory.—A stock company with capital of \$30,000 has been organized for the establishment of a furniture factory. Address J. B. Temple.*

Leaksville—Flour Mill.—J. C. and E. B. King have awarded contract for a five-stand rotary roller system flour mill.

Mocksville—Furniture Factory.—The Mocksville Manufacturing Furniture Co. has been organized, with a capital stock of \$10,000, for the establishment of a furniture factory. Address L. G. Horn.*

Monroe—Ice Factory, etc.—The Monroe Oil & Fertilizer Co. (recently reported to establish a ginnery) is increasing its capital stock to \$30,000, and has decided to install an ice plant also.

Oxford—Cotton Mill.—A movement is on foot for the formation of a \$200,000 cotton-factory company. A large part of the capital stock has been subscribed. S. W. Minor, A. A. Hicks and others are interested.

Pineola (not a postoffice)—Lumber Mill.—The Ritter Lumber Co., previously reported as incorporated, will erect a double band-saw mill at Pineola; also a saw mill at Devon with a capacity of 100,000 feet per day.

Raleigh—Knitting Mill.—The Chamber of Commerce will undertake the establishment of a knitting mill. Address W. N. Jones, president.

Seagrove—Lumber Company.—The Redding Lumber Co. has been incorporated, with a capital stock of \$5000, by J. H. Redding, Fletcher King of Ashpole, T. J. Ellis of Seagrove and others.

Statesville—Flour Mill.—James H. Sharpe is installing a 40-barrel flour mill; contract let.

Wilmington—Boat Factory.—Manuel Garcia has awarded contract to T. F. Tyler for the erection of a boat factory 30x800 feet, to be equipped with the latest improved woodworking machinery suitable for boat-building and cabinet work.

Wilmington—Blacksmith Shops, etc.—John G. Marshall and E. M. Jones have purchased the blacksmith shops of Thomas F. Bell, and will enlarge and operate, conducting a general wheelwright, plumbing, blacksmith, etc., business.

Winston-Salem.—David Brown has discovered gold quartz on his property near Winston, and will probably develop.

SOUTH CAROLINA.

Aiken—Light and Power Plant.—John Gary Evans, representing a new company, has purchased the plant of the Aiken Light & Power Co., and will greatly improve it and add other industries.

Bennettsville—Pea-huller and Separator Factory.—The Star Pea Machine Co., John M. Brasington, manager, will establish a factory in 1900 for the manufacture of pea-hullers and separators; location of plant not yet decided upon.

Charleston—Electric-light Plant.—The city will investigate the advisability of constructing an electric-light plant with capacity of 300 arc lights. Address "The Mayor."

Clark—Canning Factory.—Wm. S. Middleton contemplates establishing a fruit and vegetable cannery.*

Clifton—Cotton Mill.—The Clifton Manufacturing Co. will erect an addition to mill No. 3 and install 15,000 more spindles, making its total 11,792 spindles; contract for foundation for new building let to Alex. Gibson and J. C. Cooksey.

Columbia—Gold Mines.—James Y. Culbreath has discovered gold deposits on his property in Saluda county, and will install machinery for extensive developments.

Columbia—Electric-light Plant.—The city contemplates installing an electric-light plant of from 200 to 300 arc lights capacity. W. H. Gibbes, chairman of committee on lights, may be addressed.*

Denmark—Rice Mill.—The Denmark Milling & Ginning Co. proposes to install a rice mill, and contemplates installing a 25-ton cottonseed-oil mill.*

Greenville—Cotton Mill.—It is reported that the American Spinning Co. will erect a cloth mill, to be known as mill No. 2 and to have 10,000 spindles and 500 looms; building to be of brick, four stories, 120x250 feet, and employ 300 operatives. It is proposed to increase the capital stock from \$125,000 to \$350,000; J. H. Morgan, president.

Hickory—Cotton Mill.—The company reported last week as to be organized with a capital stock of \$50,000 for erection of a cotton mill will be known as the Marie Mills of Hickory Grove. R. M. Carroll of Blairsville, S. C., or Col. J. R. Ashe of Yorkville, S. C., may be addressed.

Lancaster—Cotton Mill.—The Lancaster Cotton Mills will at an early date increase its capital stock from \$150,000 to \$1,000,000 and add 40,000 to 50,000 spindles; orders for most of the machinery have been placed; spindles, 10,500; Leroy Springs, president.

Laurens—Laundry.—Thos. K. Hudgens of Easley, S. C., and associates will form a \$3000 company for the establishment of a steam laundry at Laurens.*

Rock Hill—Cotton Mill.—The Crescent Cotton Mills, lately reported to issue \$50,000 of bonds, will add 8500 spindles and twenty revolving flat cards; also contemplates building a new 150-foot round smokestack and installing two new boilers.

Spartanburg—Laundry.—J. O. Ervin is enlarging his laundry by the erection of an addition to building and the installation of new machinery.

Westminster—Cotton Mill.—The Cheswell Cotton Mill Co. has been incorporated by William E. Cheswell and Campbell Courtney of Newry, W. P. Anderson and W. J. Carter of Westminster and C. E. Mason of Toccoa, Ga.; capital stock \$100,000.

TENNESSEE.

Bristol—Woodworking Factory.—J. A. Stone & Bro. will establish a factory, manufacturing building materials.

Bristol—Saw Mill.—The Empire Lumber & Milling Co. has ordered machinery for a large lumber plant at Shady Valley, to have daily capacity of 75,000 feet.

Bristol—Zinc Mines.—J. S. Baxter and others have formed the Nancy Zinc Co. for prospecting various zinc properties to ascertain if the mineral is rich enough to warrant the placing of machinery and the building of furnaces; improvements will follow later.

Chattanooga—Candy Factory.—Trigg, Dobbs & Co. have secured larger building and installed new boiler and engine of sixty horse-power, a complete electric-light plant and a repumping outfit.

Chattanooga—Sewer Extension.—The city has awarded contract to J. B. Neely at \$8633 for extension of the Washington-street sewer.

Chattanooga—Shoe Factory.—Benjamin Scribner of Lynn, Mass., with Chattanooga and Atlanta capitalists, has organized a \$100,000 company for the establishment of a shoe factory at Sherman Heights; building has been secured and \$10,000 worth of machinery purchased.

Clarksville—Saw Mill.—Tandy Smith has purchased the Clarksville Bending Works and will convert it into a saw mill.

Clinton—Zinc Works.—The John Weir Zinc Co., Mossy Creek, Tenn., will erect large zinc works at Clinton.

Dickson—Latch Factory.—The National Latch Co. has been organized to manufacture the Davidson everlasting gate latch.

Fayetteville—Manufactury, etc.—Business men have optioned land and water rights on the Elk river, near Fayetteville, with a view of development and the erection of factories, probably a cotton mill first of all. It is estimated that for \$35,000 developments can be made to furnish 750 horse-power at low water.

Jackson—Publishing.—The Sun Publishing Co. has been incorporated to conduct general printing and publishing business, with a capital stock of \$7000, by J. O. Ozment, J. E. Pope, J. W. Buford and others.

Lone Mountain—Saw Mill.—The Osborne Lumber Co. of Middlesborough, Ky., has purchased 500,000 feet of lumber in Clayborne county, and will erect a saw mill at Lone Mountain for cutting it.

Manchester—Saw and Planing Mill.—Maxim Smith will rebuild his saw and planing mill reported burned.

Memphis—Coal Mines, Elevators, etc.—See item under Uniontown, Ky.

Mt. Pleasant—Electric-light Plant.—H. D. Ruhm has made a proposition to the city for establishing an electric plant for lighting and heating purposes, and to furnish power for operation of machinery.

Mt. Pleasant—Water Works.—The Mt. Pleasant Real Estate Co. (composed of H. D. Ruhm, E. L. Gregory and John Ruhm, Jr.) has applied for franchise for construction of a system of water works.

Nave Hill—Flour Mill.—J. P. Lay has installed a new 25-horse-power engine and boiler, and will install additional machinery to increase the capacity of his flour mill.

Squatchie County—Coal Mining.—The Douglass Coal & Coke Co. has purchased 14,000 acres of coal lands in Squatchie county for \$50,000 and will develop extensively, expending about \$100,000.

Waverly—Telephone Line.—The Cumberland Telephone & Telegraph Co., H. H. Fowler, district manager, will extend a branch line from Waverly to Linden.

TEXAS.

Beaumont—Woodworking Factory.—The Texas Arm & Pin Co., F. W. Greer, manager, is installing machinery for the manufacture of arms and pins, to be operated in connection with its planing mill.

Bunns Bluff—Saw Mill.—The J. F. Keith Co. of Beaumont has purchased pine lands in Orange county near Bunns Bluff and will erect a saw mill.

Denison—Chartered: The Denison Driving Park and Fair Association, with a capital stock of \$5000, to encourage agriculture and horticulture, by P. H. Tobin and others.

El Paso—Sewers and Courthouse.—The city council has passed two ordinances providing for the issuance of \$20,000 of bonds for improvement of the sewerage system and for the issuance of \$19,000 of bonds for completion of new city courthouse, now in course of erection. An election will be held October 24. Address "The Mayor."

Greenville—Water Works.—A stock company will be organized, with a capital stock of \$50,000, and W. L. Beckman, president; J. F. Phillips, vice-president; W. A. Williams, secretary-treasurer, for the construction of a system of water works.

Honey Grove—Electric-light Plant.—E. E. Blocker and T. U. Cole have leased and will operate the Honey Grove electric-light plant.

Houston—Oil Refinery.—John Davidson is establishing a refinery with a capacity of 50 barrels per day.

Houston—Saw Mills and Timber Lands.—John H. Kirby has secured control of extensive tracts of long-leaf yellow-pine timber lands in Eastern Texas, contributory to the Gulf, Beaumont & Kansas City Railway, now building. The main object in buying these lands is to enable the railroad to do business immediately upon its completion. In the event that satisfactory stumpage arrangements are not completed with manufacturers, Mr. Kirby will erect six or eight mills.

Independence—Telephone System.—W. F. Wyatt has organized a company for construction of telephone line from Independence to William Penn, and from last-named city to Whitman.

Lima—Lumber Company.—The Lima Lumber Co. has been incorporated, with a capi-

tal stock of \$20,000, by M. Thackaberry, C. G. Thackaberry and George W. Steff.

McKinney—Packery.—William Allen is establishing a packery.

Navasota—Telephone and Construction Company.—The Navasota Telephone & Construction Co. has been incorporated, with a capital stock of \$10,000, by T. C. Foster, Ward Templeman and A. H. Ketchum.

Orange—Saw Mill.—W. D. Street has established a floating saw mill.

Sartaria—Sugar Mill.—L. A. Ellis is installing an entire new plant of sugar-refining machinery, including separators, extractors, etc.

Sherman—Ice Factory and Cold-storage Plant.—B. L. Fielder is organizing a company for the erection of an ice factory and cold-storage plant, as reported last week; capacity twenty tons.

Taylor—Flour Mill.—Efforts are being made for the organization of a stock company to erect a flour mill. Address J. A. Thompson, president Board of Trade.

Texarkana—Lumber Company.—The Imperial Lumber Co. has been incorporated, with a capital stock of \$10,000, by W. C. Paxton, G. Munze and Harry Munzesheimer.

VIRGINIA.

Alexandria—Cigar Factory.—The Rex Cigar & Vending Co. has been incorporated for the manufacture of cigars, with a capital stock of \$100,000, by Addison G. Du Bois, president; Willard S. Dormus, vice-president, and Harry L. Bryan, secretary-treasurer.

Alexandria—Chartered: The Miller Home Treatment Co. has been incorporated to manufacture instruments for the cure of diseases and to sell medicines; capital stock between \$1000 and \$24,000; A. C. Miller, president; W. A. L. Riggel, vice-president; D. D. Coon, secretary-treasurer.

Barton Heights—Electric Lights and Water Works.—A. H. Meyer, B. S. Ragland and A. W. Martinstein have been appointed a committee to prepare plans and specifications for the erection of the proposed electric-light plant and water works. Address "The Mayor."

Berryville—Flour Mill and Grain Elevator. The Berryville Milling Co. has been incorporated, with C. S. Weston, president; A. W. Dickson, secretary; George Wm. Cone, treasurer, and William E. Reed, manager; has purchased the flour mills formerly operated by the T. Lovett Company and is installing new machinery to increase the capacity to seventy-five barrels per day; capital stock \$12,000.

Berryville—Water Works.—Contract for the construction of the proposed water-works system at Berryville has been awarded to the W. Riely Weaver Construction Co. of Baltimore, Md.

Big Stone Gap—Iron Furnace.—The Union Steel & Chain Co., Empire Building, New York, N. Y., is having the iron furnace at Big Stone Gap repaired and altered preparatory to going into blast.

Charlottesville—Flour Mill.—The Virginia Ice Company will add a flour mill with capacity of from fifty to 100 barrels per day to its plant.*

Christiansburg—Electric-power Plant.—The city will hold an election to decide the establishment of a plant to be operated by water-power in generating electricity for lighting purposes. Address "The Mayor."

Eggleston—Woodworking Factory.—The New River Stave Co., reported during the week (under Roanoke) as incorporated, will erect a factory at Eggleston for the manufacture of barrel staves, spokes, handles, etc., with a daily capacity of 20,000 staves, and to cost \$5000; J. T. Strickland, Roanoke, president.

Elk Garden—Road Improvement.—The Stuart Land & Cattle Co. has been organized to construct fifteen miles of macadam road from Elk Garden to Saltville.

Fredericksburg—Beet-sugar Factory.—A Mr. Spencer is investigating with a view of establishing a beet-sugar factory. Address care of State board of agriculture, Richmond, Va.

Fredericksburg—Sewerage System.—Dr. Henry Froehling of Richmond, representing a syndicate of capitalists, has applied to the city for franchise to sewer and improve the streets.

Manchester—Woodworking Plant.—The Richmond Woodworking Co. will double the capacity of its plant by erection of additional building, etc.

Newport News—The Newport News Manufacturing Co. will erect a factory for the manufacture of the Bargamin automatic gas cut-off; address care of M. E. Braxton.

Norfolk—Lunch Company.—The Virginia Lunch Co. has been incorporated, with a capital stock of \$4000, by Charles L. McDonald, president, and others.

Radford—Mining, etc.—The Radford Southern Railroad & Mining Co. has been incorporated, with George W. Miles, president; W. R. Wharton, secretary, and M. M. Caldwell, treasurer.

Richmond—Lumber Company.—The Pee Dee Lumber Co. has been incorporated, with capital stock from \$10,000 to \$50,000; B. H. Ellington, president; F. Harwood, vice-president; B. Pollard Cardoza, secretary-treasurer.

Richmond—Printing.—The Walthall Printing & Southern Tobacco Co. has been incorporated to conduct a general printing business; capital stock \$5000 to \$20,000; officers, A. J. Parish, president; W. E. Dibrell, vice-president and secretary, and W. B. Walthall, treasurer and manager.

Richmond—Abattoir.—A company has been organized, with James B. Pace, president, for the purpose of establishing an abattoir and meat-packing plant with capacity of 350 hogs and fifty beeves per day.

Roanoke—Furnace.—C. R. Baird & Co., Philadelphia, Pa., have purchased the West End furnace at Roanoke, as recently reported, and will repair and operate it.

Wise County, etc.—A dispatch states that the Virginia Iron, Coal & Coke Co. (main office Bristol, Tenn., New York office Empire Building) has awarded contract for the construction of 300 coke ovens at Toms Creek coal mines in Wise county; for 500 ovens at Coeburn, Va., and 300 ovens at Looney Creek, near Big Stone Gap. The company will also erect at Toms Creek mines a large ore-washer and an electric-light plant.

Woodstock—Water Works.—P. S. Roler, city engineer, has completed surveys for the works lately noted.

Wytheville—Broom Factory.—The Wytheville Broom Factory will install additional machinery.

WEST VIRGINIA.

Belington—Mercantile.—Frank P. Rease and others have incorporated the Randolph & Barlow Supply Co., with an authorized capital of \$100,000.

Benwood—Pumping Plant and Iron Furnace.—The Riverside Iron Works is constructing its pumping plant at a cost of \$75,000; is also receiving materials for its proposed new iron furnace.

Charleston—Toilet Company.—The X-Ray Toilet Manufacturing Co. has been incorporated to conduct general toilet business by J. H. High, W. Snooks, W. A. Forsythe and others; capital stock \$100,000.

Charleston—Milling Company.—The Carolina Milling Co. has been incorporated to conduct a general mining, milling, etc., business, by J. C. Jordan, G. E. Price, J. R. Kauffman and others; capital stock \$250,000.

Flemington—Coke Plant, Electric Plant, etc.—The Flemington Coal & Coke Co., S. L. Simpson, president, contemplates building a \$300,000 coke plant. It is installing at present a \$75,000 electric plant for cutting and getting out coal, with capacity of 4000 tons per day. The company is capitalized at \$2,500,000.

Charleston—Iron Furnace.—The Union Steel & Chain Co., Empire Building, New York, N. Y., is having the iron furnace at Big Stone Gap repaired and altered preparatory to going into blast.

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Charleston—Office Building, etc.—The Virginia Iron, Coal & Coke Co. will erect an office building and probably freight and passenger depot.

Cartersville, Ga.—Courthouse.—Bartow county will hold an election on November 15 to decide the issuance of \$30,000 for the erection of new courthouse. Address "County Clerk."

Charleston, W. Va.—Capitol Annex.—Caldwell & Drake of Parkersburg, W. Va., have received contract at \$57,605 for building the capitol annex.

Charlotte, N. C.—Warehouse.—Zeke Johnson will erect a three-story warehouse 100x40 feet.

Charlotte, N. C.—Warehouse.—The Merchants, Manufacturers & Farmers' Bonded Warehouse Co. will erect another warehouse with capacity for 40,000 bales of cotton.

Chattanooga, Tenn.—Business Building.—Frank McCormack of Dayton, Ohio, will erect a brick business block at Chattanooga.

Chattanooga, Tenn.—Dwelling.—Adams & Bearden have contract for erection of Dr. R. T. Isbester's residence, to be of buff brick, with white stone trimmings and pilasters.

Chattanooga, Tenn.—Armory.—Levi & Griffith, 41½ Lookout street, have received contract for erection of armory, as recently reported; building will be of brick, 60x145 feet, roof to be supported by five steel trusses covered with curved corrugated iron.

Corpus Christi, Texas—Pavilion.—The city will erect a \$7500 pavilion. Address "The Mayor."

Dickson, Tenn.—Jail.—Contract has been awarded for erection of the \$5500 jail, as reported last week; to be fireproof. Address C. M. Lovell, mayor.

El Paso, Texas—Hotel.—Walter E. Parfitt of New York, N. Y., will prepare plans for

Charleston, W. Va.—The dry-kiln at Morgan & Gardner's planing mill.

Dobbin, W. Va.—Saw mill at Dobbin of Whitmer, Lane & Co. of Philadelphia, Pa.; estimated loss \$20,000.

Dublin, Va.—G. S. Sexton's saw mill.

Eastville, Va.—N. L. Holland's saw mill; estimated loss \$4000.

Frederick, Md.—The cooper shop at the Frederick Flouring Mills.

Leo, Texas—Joe Murphy's gin and corn mill; estimated loss \$3000.

Manchester, Tenn.—Maxim Smith's saw and planing mill; loss about \$1200.

McKinney, Texas—A. I. Burger's cotton gin; estimated loss \$10,000.

Memphis, Tenn.—Lee Brothers Gin Co.'s plant; estimated loss \$110,000.

Mineral City, Va.—The entire plant of the Pyrites Mining & Chemical Co.

New Waverly, Texas—M. Scopinski's cotton gin; loss about \$1250.

Oakwoods, Texas—D. B. Scarborough's gin.

Paris, Texas—F. W. Wagner's saw mill; estimated loss \$2000.

Petersburg, Va.—Upson Company's plant; estimated loss \$28,000.

Troy, Texas—M. C. Elliott's gin; estimated loss \$1000.

Waco, Texas—Dennis Manufacturing Co.'s mattress factory burned to the extent of \$8000.

Zion Hill, Miss.—M. H. Wilkinson's cotton gin.

BUILDING NOTES.

Atlanta, Ga.—Apartment-house.—Nat Kalsner will erect a five-story apartment-house, equipped with all modern conveniences, to cost \$25,000.

Attala, Ala.—Depot.—The Nashville, Chattanooga & St. Louis Railroad Co. will erect freight depot; J. W. Thomas, Jr., general manager, Nashville, Tenn.

Augusta, Ga.—Depot.—The Southern Railway Co. will erect a new depot 50x600 feet; Frank S. Gannon, general manager, Washington, D. C.

Baltimore, Md.—Hotel.—Wyatt & Nolting have prepared the plans and E. M. Noel has received contract for the proposed hotel recently reported to be erected near Walbrook by Daniel W. Dwyer; building will be four stories, of stone and shingles, 200x220 feet; elevators, modern plumbing, electric and gas lighting and steam heat will be among the conveniences; six or ten cottages will also be erected; entire cost \$100,000.

Birmingham, Ala.—Hotel.—J. Fox's Sons have purchased site adjoining their present building for \$10,500 and contemplate the erection of a modern hotel.

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El Paso, Texas—Hotel.—Walter E. Parfitt of New York, N. Y., will prepare plans for

converting the Sheldon Block at El Paso into a hotel.

Greenville, S. C.—Dwellings.—It is reported that the American Spinning Co., J. H. Morgan, president, will erect forty dwellings for operatives.

Harriman, Tenn.—Depot.—The Southern Railway Co. will erect a depot at Harriman; Frank S. Gannon, general manager, Washington, D. C.

Houston, Texas—Buildings.—O. H. P. Rudesill is preparing plans for two three-story buildings for Colonel Burnett; one will be of brick and stone, 80x90 feet, and contain forty-six rooms, the second to be similar.

Kinston, N. C.—Warehouse.—The Kinston Cotton Warehouse Co., reported last week as incorporated, is erecting buildings for storage of cotton.

Knoxville, Tenn.—Hospital Building.—The Tennessee Deaf and Dumb Asylum will have plans made for a deaf and dumb asylum to cost \$5000.

Knoxville, Tenn.—Hospital.—Thomas & Turner have received contract at \$17,897 for the erection of the new city hospital, except contract for brick work, which was awarded to Garland, Walters & Everhardt at \$11,000; contract for plumbing not yet awarded.

Lewisburg, Tenn.—Store Building.—C. B. Walter and James McCord will erect a store building.

Lexington, Va.—Academy Building.—Contract for the Francis H. Smith academic building at the Virginia Military Institute has been awarded to J. E. Parrish of Lynchburg, Va.; approximate cost \$25,000.

Macon, Ga.—Warehouse.—English, Johnson & Co. have had plans prepared for a warehouse to cost about \$30,000.

Mt. Pleasant, Tenn.—Hotel.—H. D. Ruhm will erect a hotel.

New Orleans, La.—School Building.—W. S. Douglass, comptroller, New Orleans, La., will receive sealed proposals until September 25 for construction of a schoolhouse in accordance with plans and specifications on file in office of city engineer; deposit \$100; usual rights reserved.

New Orleans, La.—School Building.—W. S. Douglass, comptroller, New Orleans, La., will receive sealed proposals for erection of a school building in the seventh district until September 25 in accordance with plans and specifications on file in office of city engineer; deposit \$100; usual rights reserved.

Norfolk, Va.—School.—The local board of improvements of Brambleton ward, C. J. Jones, president, will ask the city council for an issue of \$20,000 of bonds for the erection of new school building.

Paducah, Ky.—Hotel.—The Palmer House Hotel Co. has secured site at \$11,500 and will expend \$75,000 in the erection of a hotel.

Pensacola, Fla.—Warehouses.—C. C. Kranland and J. A. Marlin of St. Louis, Mo., and Norfolk, Va., said to be representatives of the American Cotton Co. of 27 William Street, New York, are investigating with a view of erecting cotton warehouses in Pensacola.

Raleigh, N. C.—Office Building.—The Yadkin River Power Co. has purchased site for \$10,000 and will erect a \$50,000 office building.

Richmond, Va.—Warehouse.—The American Tobacco Co. has purchased site for \$14,000 and is erecting a three-story brick warehouse 264x150 feet to cost \$50,000.

Rock Hill, S. C.—Residence.—Hook & Sawyer of Charlotte, N. C., will prepare plans for residence for W. C. Whitner.

Savannah, Ga.—Depot.—T. S. Tutwiler, chief engineer of the Plant system, will prepare plans for the \$500,000 depot, previously reported to be erected in Savannah by the Georgia & Alabama, the Plant system, Florida Central & Peninsular and the Southern railways. The Union Passenger Station Co. will be incorporated to operate the depot.

Washington, D. C.—Buildings.—Permits issued to estate of R. H. Warder for three brick dwellings, three stories, 33x36 feet, Roman brick front, flat tin roof, furnace heat, cost \$12,600; to M. C. Weaver, for two-story frame dwelling, pitch slate roof, hot-water heat, cost \$12,000; to Levi Bowersox for three two-story brick and wood dwellings, red-brick fronts, tiled mansard roof, furnace heat, cost \$9000; to J. W. Gregg for three two-story brick dwellings, press-brick fronts, mansard roof, covered with tin and slate, furnace heat, cost \$12,000; to R. E. Middaugh for six two-story brick dwellings, press-brick fronts, furnace heat, etc., cost \$20,000.

Waverly, Tenn.—Church.—The Methodist congregation will erect a brick church. Address Rev. J. K. Lee, pastor.

Waycross, Ga.—Church.—Contract awarded to James B. Strickland for erection of Trinity Methodist Church building.

Wise County, Va.—Dwellings.—The Virginia Iron, Coal & Coke Co. is reported as to build 200 dwellings; main office Bristol, Tenn.

RAILROAD CONSTRUCTION.

Railways.

Atlanta, Ga.—Application has been made for a charter for the Atlanta Belt Railway, the incorporators being Messrs. Clark Howell, Henry B. Tompkins, Walter H. Harrison, G. W. McCarthy and others, and the capital stock \$500,000. The purpose is to construct a belt line to facilitate the transportation of freight by avoiding the use of the business streets.

Baltimore, Md.—The first branch city council has passed ordinance permitting the Northern Central Railroad Co. to construct certain switches and side-tracks in the city.

Burquin, Ky.—A dispatch states that W. H. Wells, engineer of the Southern Railway Co. (office in Washington, D. C., Frank S. Gannon, general manager), in company with surveyors and engineers, is to make a survey of a line from Burquin to Jellico, Tenn., a distance of 115 miles. Such an extension will form a connection of the Southern in Kentucky and the other portions of its system. It is said that the work will cost \$2,000,000 and require two years for its completion.

Chattanooga, Tenn.—It is announced that a railroad will be built from South Pittsburg, Tenn., to valuable coal lands in Sequatchie county, recently bought by the Douglass Coal & Coke Co.

Cherry Run, W. Va.—Owners of coal property lying southwest of Cherry Run are seeking to induce the building of a railroad through parts of Hampshire, Hardy and Berkeley counties, West Virginia, and Frederick county, Virginia, for which a partial survey has been made to connect with the Western Maryland Railroad.

Dallas, Texas.—George C. Bishop of Cleveland, Ohio, representing New York and Boston capitalists, is in Dallas, it is reported, for the purpose of completing arrangements for the construction of a suburban electric railway system, double-track, to extend to Oak Cliff, thence to Fort Worth, and eventually to Cleburne and Waxahachie.

Dallas, Texas.—A dispatch reports that W. C. Conner, president of the Fort Worth, Dallas & Gulf Railway, has stated the route has been granted and that the contract will positively be let next month and the work pushed forward immediately. The estimated distance is about thirty-one miles, and road is to be completed not later than next March.

Denison, Texas.—The Kansas, Oklahoma Central & Texas Railway Co., noted during the week, has a capital stock of \$5,000,000, and its contemplated railway will be 650 miles long, to extend from Salina, Kans., to Denison. O. P. Hamilton of Salina, Kans., C. A. McBrien of Watonga, Kans., and others are interested.

Frankfort, Ky.—The Kentucky Western Railway Co. has been incorporated by Morton Thayer of Kansas City and others, with a capital stock of \$100,000, to build a line from Blackford to Dickinson, touching a part of the Kentucky coal fields, and connecting with the Louisville & Nashville Railroad.

Frederick, Md.—Mr. James W. Lagare and others are planning to build an electric railroad from Frederick to Emmitsburg, about thirty miles, and to use the water-power in the Monocacy river to run the dynamos.

Gaffney, S. C.—Contract has been let to grade ten miles of the South Carolina & Georgia Extension Railroad between Marion and Johnson City, Tenn.

Knoxville, Tenn.—It is reported that the Marion & Rye Valley Railroad is to become the property of the Virginia & Southwestern Railway Co., and to be extended.

Lenoir, N. C.—It is reported that the Carolina & Northwestern Railway is to be changed to standard gauge, and to be extended from Lenoir to Elizabethton, Tenn., and from Chester, S. C., to Camden. William A. Barber of New York is the representative of the recent purchasers of the road.

London Depot, Ky.—Surveyors are at work near Rock Castle Springs running the line for the road projected by the Southern Railway from Burquin, Ky., to North Jellico, Tenn., a distance of 115 miles. It is reported that the work of construction is to begin as soon as the survey has been completed, and that it will cost \$2,000,000.

Lynchburg, Tenn.—Preliminary surveys have been completed of the proposed electric railway to extend from Lynchburg to Wartrace, and final survey was commenced on the 12th inst. Work is to commence as soon as Moore county raises a \$40,000 bonus, of which half has been obtained.

Mobile, Ala.—It is reported that sufficient progress in securing rights of way for the Mobile & West Alabama Railroad has been made to warrant the letting of contracts for the beginning of construction by January 1 next. H. Austill of Mobile is president of the company.

Nacogdoches, Texas.—Citizens have authorized the grading of depot site and right of way to induce the Southern Pacific Company to come by way of Nacogdoches in closing the gap between Rockland and Cedar.

Nashville, Tenn.—Charter has been granted for the Mount Pleasant Southern Railway Co., which proposes to build a road connecting Ridley Switch and Attalla Switch, on the Nashville, Florence & Sheffield Railroad.

Owensboro, Ky.—It is reported that surveys will begin shortly for a railroad from Indianapolis, Ind., to Owensboro.

Pickens, W. Va.—H. Spies, Lina Spies, E. F. Kummel of Pickens, A. C. Mace, E. J. Mace of Hackers Valley have incorporated the Pickens & Hackers Valley Railroad Co., with capital stock of \$100,000, to construct a railroad from Pickens to Hackers valley, a distance of fifteen miles.

Saluda, S. C.—The stockholders of the Saluda & Johnston Railroad Co., incorporated last February, are to meet at Saluda on September 30 to organize the company. The purpose is to build a road to tap the Southern Railway, either at Johnston or Wards.

San Antonio, Texas.—There is a prospect that the Missouri, Kansas & Texas Railway may construct in the near future an extension of fifty miles to connect its line with San Antonio.

Shawsville, Va.—It is stated that the work of construction of the second track for the Norfolk & Western Railway between Shawsville and Houchins, Va., will require the blowing out of two tunnels.

Sistersville, W. Va.—It is reported that bonds to the amount of \$1,400,000 have been sold to meet the expenses of building the Sistersville, Pennsboro & Burnsville Railroad, for which surveys have been completed for seventy-five miles. Mr. L. P. Wilson of Pennsboro is the president of the company.

Street Railways.

Birmingham, Ala.—The tracks on a portion of the Highland Avenue & Belt Line will be relaid with 90-pound rails.

Covington, Ky.—The Covington, Cincinnati & Erlanger Street Railroad Co. has been incorporated, with a capital stock of \$250,000, most of which has been subscribed.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Barytes Plant.—Hot Springs Barytes Co., M. H. Dingee, treasurer, Lynchburg, Va., will want an (Corliss) engine 16x42 inches, flywheel, boiler and heater connections; will also want shafting, crusher and other machinery used in barytes plant.

Blower Fan.—Richmond Cedar Works, Richmond, Va., wants a 100-inch blower fan, with engine attached, and 12,000 feet of heating pipe to go with it.

Boiler and Engine.—See "Barytes Plant."

Boiler and Engine.—See "Electric-light Plant."

Boiler and Engine.—See "Fertilizer Machinery."

Boiler and Engine.—See "Woodworking Machinery."

Brass-goods Manufacturers.—Samuel Coffin, High Point, N. C., wants to correspond

with manufacturers of finished brass goods and of small malleable-iron castings.

Canning Machinery.—Wm. S. Middleton, Clark, S. C., wants to correspond with manufacturers of canning machinery.

Carousels.—Moore & Handley Hardware Co., Birmingham, Ala., wants to buy a merry-go-round with sixteen horses.

Cotton-gin Supplies.—The Brick Ginhouse Co., Lake City, Fla., wants quotations from manufacturers and jobbers of machinery and supplies used by country ginners and other sundry mill supplies.

Cotton-oil Mill.—C. C. Henderson, Greenville, Ala., wants to purchase a 15-ton new or second-hand cottonseed-oil mill.

Dry-dock.—Emanuel Garcia, Wilmington, N. C., wants plans and proposals for necessary machinery for the construction of a screw dry-dock to lift about 200 registered tons of about nine feet draught.

Electrical Machinery.—See "Foundry Equipment."

Electrical Machinery.—Thronateeska Ice, Light & Power Co., Bainbridge, Ga., will be in the market for a 75-kilowatt alternating dynamo and a 50-kilowatt power generator.

Electric-light Plant.—The city of Tupelo, Miss., will receive bids on erection of electric-light plant. Address V. C. Kincaid, Com.,

Electric-light Plant.—W. L. Plack, 1403 Filbert street, Philadelphia, Pa., wants estimates on one 100-horse-power boiler, one 45-horse-power engine, one 30-kilowatt alternator, 2000 volt, transformer, wire cross-arms, insulators, etc.

Electric-light Plant.—The city of Odessa, Mo., will purchase steam and electrical machinery for plant of thirty-five arc and 1200 incandescent lights. Address E. F. Blake, mayor.

Electric-light Plant.—Bids are wanted by R. A. Houston, DeWitt, Ark., until September 25 for furnishing materials and constructing a plant with capacity for eight 1200-candle-power arc and 200 16-candle-power incandescent lights; will also want boiler of thirty horse-power, 25-horse-power engine, one dynamo of 250 lights, sixteen candle-power; one 10-light machine, 1200 candle-power each; wire insulators, cross-arms, pins, etc., and all necessary equipment for power-house.

Electric-light Plant.—W. H. Gibbes, chairman of committee on lights, Columbia, S. C., desires information and estimates on installing an electric-light plant of from 200 to 300 arc lights capacity.

Electric-light Plant.—Brookhaven Lumber & Manufacturing Co., Brookhaven, Miss., wants to contract for electric-light plant complete to furnish five arc lights and fifty to seventy-five 16-candle-power incandescent lights; to be installed at mill ready for use in thirty days after agreement is made; quantity of wire, switchboard, etc., required furnished on application. Second-hand in practical condition will answer.

Elevator.—Stevens & Etheredge, Johnston, S. C., want an elevator for warehouse; size floor 8x12.

Engine.—Seminole Lumber Co., Lake City, Fla., wants a 15 to 20-horse-power engine, plain slide valve.

Engine.—J. V. Munn, Winnsboro, La., wants one 35-horse-power engine.

Fertilizer Machinery.—Gainesville Fertilizer Works, Gainesville, Fla., will want to purchase new machinery next spring, including engine and boiler.

Flour Mill.—Virginia Ice Co., Charlottesville, Va., will want complete outfit for flour mill with capacity of from fifty to 100 barrels per day.

Flour-mill Machinery.—John B. Chapman, Slanesville, W. Va., will probably want to correspond with manufacturers of flour-mill machinery.

Flour-mill Machinery.—Mr. Pearce, Ashboro, N. C., wants to correspond with flour-mill machinery manufacturers.

Flour-mill Machinery.—Conner Milling & Elevator Co., Holden, Mo., will want to purchase entire equipment for flour mill.

Foundry Equipment.—Dimmick Pipe Co., Miss Charlotte Blair, secretary, Anniston, Ala., is in the market for electrical machinery and material necessary for equipping a 100-ton cast-iron pipe works, including wrought-iron core barrels, etc.

Furniture Machinery.—See "Woodworking Machinery."

Furniture Machinery.—See "Woodworking Machinery."

General Machinery.—F. G. Sada, general manager of Cerveceria Cuauhtemoc, Monterrey, Nueva Leon, Mexico, is interested in the following machinery and will be pleased to receive communications from America

manufacturers: Steam engines and boilers, lumber-mill equipments, agricultural implements, electrical machinery, office fixtures, brewery apparatus, ice machines, cooperage machinery, ammonia bottles, box shooks, novelties for advertising, lithographs, glass-bottle equipments, etc.

Glass.—Cypress Lumber Co., Apalachicola, Fla., will be in the market for plate glass for sash and door factory.

Grading, etc.—See "Railway Work."

Hardwood Manufacturers.—Anderson Lumber Co., Jesse M. Smith, manager, Anderson, S. C., wants to correspond with manufacturers of and dealers in hardwood lumber.

Ice Factory.—S. M. Tatum, Tampa, Fla., wants complete machinery for a 10-ton ice factory.

Ice Machinery.—Thronateeska Ice, Light & Power Co., Bainbridge, Ga., will be in the market for a 10 to 15-ton ice machine.

Iron Castings.—See "Brass-goods Manufacturers."

Iron Manufacturers.—Dimmick Pipe Co., Miss Charlotte Blair, secretary, Anniston, Ala., desires correspondence with firms making patterns for pipe and special foundry work, also with foundries prepared to make pipe flasks, etc.

Jute Machinery.—George U. Borde, M. E., Liverpool and London and Globe Building, New Orleans, La., wants addresses of manufacturers of jute-working machinery.

Laundry Machinery.—Thos. K. Hudgens, Easley, S. C., wants to correspond with manufacturers of steam-laundry machinery.

Logging Equipment.—See "Railway Equipment."

Logging Machinery.—E. A. Hallam of the Red Cypress Co., Macon, Ga., wants to purchase heavy machinery for logging cypress logs.

Lumber.—Robert Ganz, Hamburg, Germany, is in the market for American wood in logs, blocks, etc.; also for large staves and heads, cedar wood and building wood.

Lumber.—Dimmick Pipe Co., Miss Charlotte Blair, secretary, Anniston, Ala., is in the market for a large quantity of pattern lumber, both white pine and poplar.

Lumber, etc.—W. A. Liller, 310-16 Davis street, Keyser, W. Va., will need North Carolina pine flooring, ceiling, siding, etc.

Machine Tools.—Kentucky Folding Crate Co., Bowling Green, Ky., will need a planer eighteen to twenty-four inches, one metal lathe, screw-cutting, with 12 to 14-inch swing, new or second-hand.

Medicine-factory Equipment.—See "Mixing Machinery" and "Trusses, etc."

Mill Supplies.—See "Cotton-gin Supplies."

Mining Equipment.—Crooked Fork Coal Co., George P. Howard, president, Petros, Tenn., desires to purchase one or two machines for rapidly mining coal.

Mining Equipment.—See "Barytes Plant."

Mining Machinery.—The Pineville Coal Co., R. Holmyard, general manager, Pineville, Ky., will probably need machinery for coal mining.

Mixing Machinery.—J. H. Hill, P. O. Box 155, Hendersonville, N. C., wants addresses of manufacturers of machines for mixing baking powders.

Mixing Machinery.—Great Forest Remedy Co., Bolivar, Mo., wants to correspond with manufacturers of mixers and tablet machines.

Oil Mill.—Denmark Milling & Ginning Co., Denmark, S. C., desires prices on a 25-ton cottonseed-oil mill.

Pipe Works (Cast-Iron).—See "Foundry Equipment."

Piping.—See "Blower Fan."

Printing Press.—Robert W. Poyner, Bingham, Tenn., wants to buy small self-inking printing press.

Railway Equipment.—Elizabeth City Lumber Co., Elizabeth City, N. C., is in need of 20-pound and 25-pound second-hand rails delivered on cars at Edenton, N. C.

Railway Equipment.—Johnston Bros., Pineville, Ky., are in the market for a second-hand 10-ton (Climax) logging engine for wood rails.

Railway Work.—Sealed bids for grading about six miles of the Albany extension, aggregating about 45,000 cubic yards of earthwork, will be received by the Georgia Northern Railway Co., Moultrie, Ga., until noon of September 30. Profile and specifications may be obtained from the undersigned, or from D. Lee Wardroper, chief engineer, 503 Gould Building, Atlanta, Ga.; C. W. Pidcock, second vice-president and general superintendent.

Rice Mill.—Denmark Milling & Ginning

Co., Denmark, S. C., desires prices on rice mills.

Rolling-mill Equipment.—W. H. Noxon, 7 Pine street, New York, N. Y., wants a 10-inch rolling mill, scrap shears, buckstays for furnace, 100-horse-power rolling-mill engine and steam hammer.

Rubber-stamp Machinery.—Louis H. Zehnder, 344 West Capitol street, Jackson, Miss., wants to buy an outfit for manufacturing rubber stamps.

Saw Mill.—J. V. Munn, Winnboro, La., wants a saw mill, single saw, 58-inch.

Saw-mill Machinery.—See "Machine Tools."

Scales.—Sealed proposals will be received until September 27 for railroad track scales of eighty tons capacity, to be installed at the Mount Royal pumping station. Specifications can be obtained of Frank H. Sloan, city surveyor, Builders' Exchange Building. Each proposal must be accompanied by check for \$100. Bond required. Usual rights reserved. William L. Kenly, chief engineer water board, Baltimore, Md.

Shuttle Machinery.—Anderson Lumber Co., Jesse M. Smith, manager, Anderson, S. C., wants to correspond with manufacturers of shuttle machinery; also with spool and bobbin manufacturers.

Spool and Bobbin Manufacturers.—See "Shuttle Machinery."

Stave Manufacturers.—See "Wood."

Stone-cutting.—H. Y. Simpson, Laurens, S. C., wants saws and machinery for sawing soapstone into good-size blocks.

Street Paving.—W. S. Douglass, comptroller, New Orleans, La., will receive sealed proposals until September 25 for paving with asphalt Hancock street, from North Penders to Burgundy streets, in accordance with plans and specifications on file in city engineer's office; deposit \$300; bond \$900; usual rights reserved.

Sugar Machinery.—Box 404, Atlanta, Ga., wants to correspond with manufacturers of centrifugal machines, such as are used by sugar boilers and refineries.

Tablet Machines.—See "Mixing Machinery."

Tank.—S. P. Peck, Hinton, W. Va., wants a second-hand iron box two feet deep, five feet wide and twelve feet long, water-tight, no top and one-eighth inch thick, for submerged condensing coils.

Tank.—Richmond Cedar Works, Richmond, Va., is in need of a second-hand storage tank for benzine of 4000 to 6000 gallons capacity.

Telephone Equipment.—North Electric Co., 61 to 73 Frankfort street, Cleveland, Ohio, will soon be in the market for the outside equipment for a telephone exchange, including poles, wire cable, cross-arms, etc.

Textile Machinery.—See "Jute Machinery."

Trusses, etc.—Great Forest Remedy Co., Bolivar, Mo., wants to correspond with manufacturers of trusses, suspensory bandages, abdominal belts, etc.

Typewriter.—Robert W. Poyner, Bingham, Tenn., wishes to buy a second-hand typewriter (American or Woodstock preferred).

Water Works.—The city of St. Mary's will soon be ready for machinery for water works. Address John F. Barron, mayor.

Water Works, etc.—The city of Clarksdale, Miss., will open bids October 3 for the construction of water works and sewer system, of which general plans and specifications are now on file. Bids will be received for furnishing material and construction as a whole or on the material in part. For further information address Al Nachman, city clerk. (See advertisement in Manufacturers' Record.)

Woodworking Machinery.—J. B. Temple, Kinston, N. C., wants to correspond with manufacturers of and dealers in woodworking machinery.

Woodworking Machinery.—The Mocksville Manufacturing Furniture Co., Mocksville, N. C., will in the near future need boiler and engine and machinery for manufacturing furniture.

Wrought-iron Core Barrels.—See "Foundry Equipment."

TRADE NOTES.

Steam Plant for Sale.—It frequently occurs that by reason of the installation of a larger steam plant the owners of a steam plant will offer for sale their old machinery at a bargain. An opportunity to purchase such a steam plant is offered by "The Raleigh," Washington, D. C. This hotel presents a list of the machinery included in its offer, the entire equipment being most

complete and of the highest grade. (See advertisement.)

Alex. L. McKaig.—Announcement is made of the death of Mr. Alexander L. McKaig, treasurer of the Pittsburg Meter Co. of Pittsburg, Pa. Mr. McKaig was also manager of the company mentioned, and his ability was largely instrumental in securing for that corporation a most extensive clientele for the consumption of its goods.

Tanning Liquid Factory.—The special machinery and entire equipment of the Dongola Tanning Co. of Jeannette, Pa., is to be sold. This plant was built in 1891 at a cost of about \$800,000, and it produces a liquid for tanneries by a French process. The W. J. Carlin Co. of 810 Lewis Block, Pittsburg, Pa., is offering the property.

Heating and Ventilating.—After a thorough investigation of different systems, the board of education of Raleigh, N. C., awarded the contract for mechanical system of heating and ventilating and sanitary flush closets to be placed in the Centennial, Murphy, Watson and Wiley schools, to the Peck-Hammond Company, heating and ventilating engineers of Cincinnati, Ohio. This is one of many contracts closed by this company recently.

Gyrator Flour Mills.—The Gyrator system of flour milling as installed by the Wolf Company of Chambersburg, Pa., continues to enhance its popularity with flour millers. Recent contracts received by the company include a complete 40-barrel mill at McDearman, Tenn.; general overhauling and remodeling to gyrator system a 200-barrel mill at Kearney, Neb.; new 50-barrel mill at Hixton, Wis., and 50-barrel mill (with corn mill) at Salisbury, Md.

Schumacher & Boye.—Messrs. E. A. Schumacher and F. W. Boye, Jr., have formed, under date of September 1, a partnership under the title of Schumacher & Boye for the manufacture of machine tools. The new firm acquires the interest of Mr. Jacob Dietz (who retires), in the firm of Dietz, Schumacher & Boye, and all indebtedness is assumed by, and all obligations to the said firm are payable to, the new one of Messrs. Schumacher & Boye.

Factory Building Offered.—Next March there will be available in Cumberland, Md., a factory building, which is to be sold or leased. The property includes 58x197-foot building, with hoistway, superintendent's office, engine-room, smith shops, boiler-room, packing-room, dry-kiln, etc. Lumber yard attached is about 75x230 feet and 36x112 feet, with brick dwelling and office, etc. For further information address Wright Butler (or see advertisement).

Exhibiting Railway Supplies.—The National Export Exposition, now being held at Philadelphia, will enable many prospective buyers of machinery to become familiar with the actual operation of apparatus they may contemplate securing. Among the exhibitors giving such facilities to buyers is the Thornton N. Motley Co. of 43 John street, New York city. This company is showing a drill operating on a large piece of granite, also hand and push cars, jacks and other miscellaneous railway supplies.

Steam-Towing Machines.—One of the Shaw & Spiegler patent automatic steam-towing machines has been ordered for a steamer operated by a company of Skelleftea, Sweden. A steam windlass, a Shaw & Spiegler patent automatic steam-towing machine and a steam cargo winch have also been ordered for the steel cargo steamer now building at Portland, Ore., for the Alaska Packers' Association of San Francisco. The equipments referred to are manufactured by the American Ship Windlass Co. of Providence, R. I.

Filtering in Textile Mills.—In the production of textile goods the purity of the water used enters largely. Manufacturers in this line who are on the "qui vive" for the latest devices that filter water successfully will find it to their advantage to investigate the equipments constructed by the New York Filter Manufacturing Co. of 26 Cortlandt street, New York city. This company produces a different line of equipment for differing services and plants. Many orders are filled by this company. Its most recent contract with a textile mill was placed by the Jamestown (N. Y.) Worsted Mills for a large plant.

Ventilation on Repair Ship.—One of the most important problems presented in the equipment of the repair ship Vulcan, described in a recent issue of the Engineering Magazine, was that of maintaining an durable atmosphere in the forge shop and

foundry, which were located between decks. The problem was solved by introducing a large steam fan and system of piping. This installation, like that in connection with the foundry equipment, was made by the B. F. Sturtevant Co. of Boston. The fan was applied to exhaust the smoke from the forge hoods, and coincidentally the hot air from the forge shop. The officers in charge said: "This arrangement proved of inestimable value."

Bullock Electrical Apparatus.—Our heading refers to a line of machinery that continues to find favor, especially among the more exacting users. Sales reported by the manufacturers for August embrace fifty-two machines, ranging in size from two and one-half to 800 kilowatts capacity. Orders were from all parts of the United States, and two were from Great Britain; the latter consisted of a 50-horse-power equipment to operate printing presses at Aberdeen, Scotland, and four 50-horse-power equipments for printing presses at Edinburgh. The Bullock Electric Manufacturing Co. is of Cincinnati, Ohio, and it has just issued Bulletin No. 1332, copies of which may be obtained on request.

Demand for Gas Engines, etc.—One of the signs of the times in recent years has been the increase in the use of gas and gasoline engines throughout the industrial world. The revival of activity that has been a part of the year now drawing to a close proved a strong stimulant to the demand for such engines. In lumber manufacturing also the activity of this year has been marked, and the demand for supplies for that trade has been on the increase daily. Mention is made of these two lines in connection because of the Champion Saw & Gas Engine Co. of Beaver Falls, Pa., which manufactures solid and inserted tooth circular saws, gang, drag and cross-cut saws, milling saws, and "Champion" gas or gasoline engines. Catalogues are ready.

Anent A. N. Palmer & Co.—The removal of A. N. Palmer & Co.'s headquarters from Baltimore to Norfolk, Va., announced several weeks ago, has been used in some quarters to give the impression that this firm had retired from the electrical-supply business. This misrepresents the situation completely. The fact is that the trade of A. N. Palmer & Co. throughout the South was growing so rapidly it became necessary to provide better facilities for taking care of their customers' interests South. Consequently they have established a store at Bank and Main streets in Norfolk, stocked with a complete line of electrical goods of all sorts. Their building is six stories high, giving them ample storage capacity and unusual facilities. The firm will also maintain the Baltimore store as a branch, and the trade in Baltimore city and vicinity will have the same care and interest in the future as heretofore.

Second-Hand Machinery.—The development of manufacturing interests has produced a demand for second-hand machine tools that is continually increasing and widening. There are numberless establishments in which certain machinery and tools are demanded, and where second-hand apparatus will answer the proprietors' requirements as well as those that are brand new. Such second-hand machinery must not be out of date in design or so worn that it is fit for nothing but the scrap heap. It must be in prime condition and in practical working order. The U. Baird Machinery Co. of Pittsburg, Pa., has decided to establish, besides its line of new machines (which are well known to users), a depot for the repair and sale of second-hand apparatus. The company has secured a large warehouse with 11,000 square feet of floor and arranged to display an immense stock of second-hand machine tools. A shop is connected with the house, where all machines will be thoroughly overhauled, broken parts replaced and practically made new. A list of the present stock can be obtained on request.

Mechanical Dryers.—In many industries the operation of drying enters to a large extent. There was a time when this operation was crudely done, but modern science has introduced mechanical means by which it can be expeditiously and economically performed. The "Cummer" dryers are well known throughout this country and foreign ones where industries needing such equipment are operated, and the manufacturer receives orders for it from all parts of the world. The F. D. Cummer & Son Co. of Cleveland, Ohio, is this manufacturer, and a brief reference to its latest orders may give an inkling of the popularity its dryers have achieved. Order from Peterborough, Ont., calls for plant to evaporate two and

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one-half tons of water per hour from peat fuel; from Virginia for a dryer to handle two and one-half tons of slack coal per hour; from Michigan for plant to evaporate two tons of water per hour from marl; from Brussels, Belgium, for equipment to dry fifteen tons of chalk per hour and to dry four tons of clay per hour; from Vancouver, B. C., dryer to dry fifty tons of fish scrap daily; from North Sidney, N. S. W., for special dryer for handling tripoli. Other orders were received from various States.

Economy in Power Plants.—The fierce competition of the times makes it necessary that all manufacturers be operated with the strictest economy. Such economy, by reducing the expense of the finished product, enables manufacturers to dispose of their goods at the lowest possible figure consistent with other factors entering into the production thereof. In the power plant economy can be practiced in a manner that will save much money. One of the important ways of economizing is by saving fuel. The Green Fuel Economizer Co. of Matteawan, N. Y., manufactures an economizer that it claims will enable users of power to save from 10 to 20 per cent. in the outlay for fuel. This device utilizes the waste heat from fuel gases to heat the feed water to a higher temperature. In this way there is always ready a large volume of reserve water, heated to the evaporation point, ready for immediate use in the boilers. This not only saves fuel supply, increasing the boiler efficiency by adding to the heating surface, but will prolong the usefulness of boilers, the hot feed water preventing the usual expansion and contraction. Recent sales of the Green economizer were in all parts of the United States, to industrial plants of all kinds, many of them being repeat orders. One company orders equipment for a 32,000-horse-power plant; another sends its sixth order; another its fourteenth order. Noticeable among the orders received were those from Southern cotton factories.

TRADE LITERATURE.

Machinery Poster.—Mr. L. Best of 45 Vesey street, New York city, issues a poster, containing illustrations of a large number of the machines he handles. Mr. Best is selling agent for Sterling emery and corundum wheels, emery-grinding machinery, polishing machinery, knife-grinders, etc.

Miners' Candlesticks, etc.—A booklet has been issued illustrative and descriptive of the miners' candlesticks and double-crimped mining cloth manufactured by the Ludlow-Saylor Wire Co. of St. Louis, Mo. The company's trade in these goods has been large, and is continually increasing. Those contemplating placing orders are invited to transmit them promptly in order to obtain early shipments.

Anything Electrical.—Two leaflets in the electrical line have been issued by the Stewart Electrical Co. of southeast corner Fifth and Sycamore streets, Cincinnati, Ohio. This company aims to remind the users of electrical apparatus that it is prepared to repair damaged machines, buy or sell second-hand machines, furnish new machines, rent dynamos or motors, etc.; in fact, contract for electrical business generally.

Crushing and Pulverizing Machinery.—Many manufacturing enterprises of the day require for their operation various machines for crushing and pulverizing, etc. Aneant this fact reference is made to the fourth edition of catalogue No. 8 of Messrs. Fraser & Chalmers, engineers, of Chicago, Ill.; London, England; Mexico City, etc. The company manufactures the "Comet," Blake, Dodge and other crushers, improved crushing rolls, ball-pulverizing mills, appliances for treatment of ores, also for pumping stations, hoisting equipments, power stations, etc. Address the Chicago office for further information.

Improved Method of Flushing Closets.—The building trades will find of much interest a new method of flushing water closets now being introduced. This system has been patented and invented by Mr. David T. Kenney of Plainfield, N. J., a practical plumber of years' experience, who made sanitary engineering a study. This device has been named the "Flushometer," and it is to all intents and purposes a well-constructed water meter of so sensitive a construction that by easy adjustment it can be made to measure the supply to the bowl, yield the same quantity in all cases, and the volume increased or diminished as may be desired. The Kenney Co. of 72 and 74 Trinity Place, New York city, is manufacturing and introducing the "Flushometer." Book of full description on application.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

The Bank of Estill County is to be established at Irvine, Ky., by W. T. Williams' Sons. The capital stock is \$10,000.

A bank has been organized at Littleton, N. C., with J. H. Harrison, president; B. H. Burroughs, vice-president; W. L. Powell, cashier, and S. G. Daniel, attorney.

The Bank of Madison, N. C., has commenced business with Col. J. M. Galloway as president; William C. Ruffin, vice-president, and J. O. Ragsdale, cashier.

The National Bonding Co. of Washington, D. C., has been organized, with \$1,000,000 capital stock. John B. Wight is president; William S. Thompson, vice-president; James E. Fitch, treasurer, and John B. Larner, secretary.

Charter has been granted to the Shenandoah Valley Loan & Trust Co. of Woodstock, Va., with capital stock of \$50,000, for the purposes indicated by its title; E. D. Newman, president; Geo. W. Windle, vice-president, and M. H. Wunder, secretary-treasurer.

A bank has been organized at Oglethorpe, Ga., with W. S. Witham of Atlanta as president; J. P. Nelson, vice-president; J. W. Freeman of Lawrenceville, Ga., cashier; the directors are J. P. Nelson, A. Greer, M. N. Childs, D. P. Coogler and W. H. Stewart.

New Securities.

The city council of Blockton, Mo., has authorized the issuance of \$4200 water-works bonds.

Dougherty county, Georgia, will vote next month upon the proposition to issue \$15,000 bonds.

The citizens of Greenwood, Miss., have decided to issue \$50,000 water-works and sewerage bonds.

Owensboro, Ky., will vote next November upon the issuance of \$200,000 4 per cent. street-improvement bonds.

An election will be held at Tallahassee, Fla., October 10 upon the question of issuing \$15,000 bonds for an electric-light plant.

The citizens of Wadesboro, N. C., have voted favorably upon the proposition to issue \$25,000 water and electric-light bonds.

Clarksdale, Miss., has voted favorably upon the issuance of \$27,000 bonds for the erection of an electric plant, water works and sewer system.

Trowbridge, McDonald & Niver Co. of Chicago has been awarded the \$20,000 5 per cent. courthouse bonds of Conecuh county, Alabama, at 105.30.

Sealed bids for the purchase of \$10,000 5 per cent. electric-light bonds of Odessa, Mo., will be received up to October 2 by T. R. Taylor, city treasurer.

The city council of Biloxi, Miss., has accepted the bid of F. R. Fulton & Co. of Chicago for its \$25,000 worth of street improvement bonds. A premium of \$161 was obtained.

The town of Durham, N. C., has sold its \$100,000 of stock in the Durham & Northern Railroad to D. Y. Cooper of Henderson, N. C., for \$35,500. This was the only bid received.

The city of Galveston sold last week \$300,000 worth of 5 per cent. sewerage bonds for \$386,187.50, with accrued interest, to E. H. Gay & Co. of New York. There were ten bids in all.

The State board of education of Texas has purchased for the school fund \$35,000 Bexar county and \$65,000 Brazoria county refunding courthouse, jail and bridge bonds and \$33,000 courthouse bonds of McCulloch county.

Financial Notes.

A 5 per cent. dividend has been declared by the Alabama Mineral Land Co.

The Mississippi Valley Trust Co. of St. Louis has declared a dividend of 1½ per cent. on the paid-up capital.

The La Grange (Ga.) Creamery Co. has declared a dividend of 10 per cent. and passed an amount to surplus.

Caraleigh Mills Co. of Raleigh, N. C., has declared an annual dividend of 4 per cent. on both common and preferred stock, payable October 2.

The First National Bank of Florence, Ala., has bought at par the \$24,000 5 per cent. warrants of Lauderdale county for courthouse and bridge construction.

The recently-organized Exchange National Bank of Richmond, which will open for business October 1, has changed its name to the American National Bank of Richmond.

The Baltimore city finance commissioners have ordered the city register to purchase \$450,000 worth of city stock for the sinking funds and fixed the interest on two new Western Maryland Railroad loans at 3½ per cent.

The finance committee of the council of Newport News, Va., determined to ask bids of the five banks of the city for the privilege of having the deposit of \$60,000 of the \$94,000 recently obtained by the sale of bonds. Schmelz Brothers bid the highest, 4 per cent., provided the money was to remain undisturbed for ninety days. Their bid was accepted.

Cecil County Fair at Elkton—Reduced Rates via Pennsylvania Railroad (Philadelphia, Wilmington & Baltimore Railroad).

For the accommodation of visitors to this Fair, to be held October 3, 4, 5 and 6, the Pennsylvania Railroad Co. (Philadelphia, Wilmington & Baltimore Railroad) will sell excursion tickets, including admission to the grounds, from all stations on the Maryland division between Wilmington and Baltimore on October 3, 4, 5 and 6, good to return until October 7, at greatly-reduced rates. Children between the ages of five and twelve years half rates.

Niagara Falls Excursions—Low-Rate Vacation Trips via Pennsylvania Railroad.

September 7 and 21 and October 5 and 19 are the dates of the remaining Pennsylvania Railroad popular 10-day excursions to Niagara Falls from Baltimore.

Excursion tickets, good for return passage on any regular train, exclusive of limited express trains, within ten days, will be sold at \$10 from Baltimore. A stop-over will be allowed at Buffalo, Rochester, Canandaigua and Watkins within the limit returning.

A special train of Pullman parlor cars and day coaches will be run with each excursion. An extra charge will be made for parlor seats.

An experienced tourist agent and chaperon will accompany each excursion.

Tickets for a side trip to the Thousand Islands (Alexandria Bay) will be sold from Rochester in connection with excursions of September 7 and 21, good to return to Rochester or to Canandaigua via Syracuse within five days, at rate of \$5.50.

Tickets for a side trip to Toronto will be sold at Niagara Falls for \$1 on September 23. In connection with excursion of September 7, tickets will be sold to Toronto and return at reduced rates, account Toronto Fair.

For pamphlets giving full information and hotels, and for time of connecting trains, apply to nearest ticket agent, or address B. Courlaender, Jr., passenger agent, Baltimore and Calvert streets, Baltimore.

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Sturtevant Engines, etc.—For a third of a century the name "Sturtevant" has called to mind visions of fan blowers, heating, ventilating and drying systems and the like. The name has also added significance, for it is suggestive of high-grade steam engines, electric motors and generating sets. For years the "Sturtevant" engine has been gradually developed and perfected, while the past decade has witnessed the rapid growth of the electrical department of the B. F. Sturtevant Co. At the present rate of development it bids fair to overtop all other lines of manufacture in this well-known establishment. Treatises on the company's machinery may be obtained by addressing the Boston office.	
The Slide Valve.—Useful information for engineers, electricians and contractors has been a feature of a series of practical handbooks published by Messrs. Spon & Chamberlain of 12 Cortlandt street, New York city. One of these handbooks, "The Slide Valve, Simply Explained," has been recently revised and enlarged and issued, fully illustrated with original drawings and diagrams. The work is by Mr. W. J. Tennant, Asso. M. I. M. E., the revision being by J. H. Kinealy, D. E. It is based upon notes and diagrams which were prepared for the purpose of helping railway students toward the attainment of clear general notions upon the important subject of the slide valve. There is no more important part of the steam engine than the slide valve, and this treatise will appeal strongly for the study of those interested in this subject. (List price of book is \$1.)	